STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706-1255 • (208) 373-0502

Dirk Kempthorne, Governor
Toni Hardesty, Director

March 11, 2005

Stakeholders
Centennial Mine
Permit to Construct Facilities for Ore Processing
By Cyanidation Permit #CN000030

Dear Stakeholder:

The Department of Environmental Quality (DEQ) has completed the public review and comment period, in regards to Desert Mineral Mining LLC's (DMM) application to construct and operate a small mineral cyanidation processing facility in Elmore County. DEQ has reviewed over 409 comments submitted by the public, DMM, and local, state and federal agencies. Furthermore, DEQ has reviewed and approved of the modified engineering designs and specifications for DMM's facilities, which were significantly downsized to process less than 22,000 tons.

DEQ has compiled public comments, and DEQ's discussion and final response to those comments in the document "DEQ Response to Public and Agency Comments. Desert Mineral Mining LLC's DRAFT Permit #CN-000030." The report is being provided as a courtesy to the major stakeholders who provided significant comments and participation in the permitting process. Other interested parties may view the document on DEQ's website. http://www.deq.state.id.us/waste/permits_forms/permitting/cyanide/overview.cfm

Pursuant to the Rules for Ore Processing by Cyanidation (Rules), IDAPA 58.01.13, the Director has determined that DEQ will issue a permit to DMM. Issuance of the final permit should occur in the next 21 and 30 calendar days.

DEQ appreciates the productive participation of the public and local, state and federal agencies in this permitting process.

Sincerely,

Bruce A. Schuld
Mine Waste Projects Coordinator
Waste Management and Remediation Division

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DEQ Response to Public and Agency Comments

Desert Mineral Mining Company LLC Draft Permit for Ore Processing by Cyanidation

Idaho Department of Environmental Quality
March 2005

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Introduction

DEQ Response

to Public and Agency Comments.

RE: Desert Mineral Mining LLC's DRAFT Permit #CN-000030 "To Construct and Operate An Ore Processing Facility at the Centennial Mine

The Idaho Department of Environmental Quality (DEQ has received and reviewed the written comments submitted by professionals, inside and outside of DEQ; the proponent, Desert Mineral mining Company LLC (DMM); and the public. These written comments are presented below, as are DEQ responses and resolutions concerning the comments.

Comments and responses are addressed in three separate sections:

- *Section One* (pages 3-145) lists comments that are relatively unique, and which therefore require an individual response by DEQ.
- *Section Two* (pages 145-161) lists comments relative to the requirements for a $25,000 bond and for a "leak detection and collection system." The responses to these comments are concise, because many public comments resonate the same two concerns.
- *Section Three* (pages 161-175) lists comments that do not require technical or regulatory response relative to the rules for ore processing by cyanidation as listed in IDAPA 58.01.13, *Rules for Ore Processing by Cyanidation*. These last comments present statements, either for or against mining, but do not address issues relative to the rules and therefore cannot be considered in the Director's determination of whether or not to issue a permit to DMM.

In the interest of formatting this document in the most useful way for the applicant and the general public, some correspondence containing large volumes of irrelevant discussion before making a specific point or comment were abbreviated to get to the specific point or comment being offered by the correspondent.

- Text presented in **Black** are comments made to DEQ in response to the Draft Permit. The individual or organization making the comment is identified for the first comment, and each comment that follows is from the same individual/organization unless a new individual/organization is specified.
- Text presented in **Blue** is DEQ's discussion of the comment.
- Text presented in **Red** is DEQ's resolution of the issue in the context of inclusion or exclusion from the Final Permit, and for which DMM will become responsible for compliance.

Individuals who are specifically interested in DEQ's discussion and response to their individual comments or those made by other individual entities are advised to utilize the Index of Comments in provided on page 177.

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Section One: Comments Requiring Individual Response

Comment/Response 1.

Commenter: Desert Mineral Mining, LLC

Desert Mineral Mining, LLC (DMM) has reviewed DEQ's draft permit for our Centennial Mine Project.

We suggest that a definition for "neutralized solutions" and/or ore be added. This should be tied to the state's 0.2 mg/l WAD criteria, as is required for other cyanidation facilities in the state.

IDAPA 58.01.13.002.24 already defines "Treatment" as "any method, technique or process, *including neutralization*, designed to change the physical chemical or biological composition of a waste for the purpose of disposal."

Further; IDAPA 58.01.13.200.05, "Disposal or Abandonment of Leached Ore," subpart (a), provides that "The concentration of weak acid dissociable cyanide [WAD] or free cyanide and other pollutants associated with cyanidation in process-contaminated water draining from the leached ore is reduced to a level that is based on the disposal method, location and the potential for ground and surface water contamination, or the pH of the process-contaminated water draining from the leached ore is stabilized between six point five (6.5) and nine point zero (9.0), prior to disposal or abandonment."

DEQ will provide a definition of "neutralization" in the permit. However, the definition of "neutralization" will contain appropriate language for all contaminants of concern, including WAD cyanide, nitrate as $NO_2 + NO_3$, free chlorine, and the metals arsenic, cadmium, copper, and silver. The definition will also provide for pH.

Comment/Response 2.

Commenter: Desert Mineral Mining, LLC

VI. Operating Plan, Item 2: DMM proposes that this requirement state that "the processing operations described may be modified, based on operating experience and approval by IDEQ". This is the purpose of a small-scale or pilot facility. The condition should not be over-restrictive, in this regard.

DEQ does not understand what this comment pertains to. The provisions in the draft permit, Section VI, Operating Plan, subsections A, B, C, D, and E were written in accordance with DMM's application and the appropriate sections of IDAPA 58.01.13. The regulations may intend to provide DEQ with the discretion to not be overly restrictive, but it does not allow DEQ to be less protective.

Discharge of process wastewaters through land application, non-point source, or point source discharges, whether neutralized or not neutralized, will not be an authorized activity.

DEQ will not remove this stipulation.

Comment/Response 3.

Commenter: Desert Mineral Mining, LLC

VI. Operating Plan, Item 5: See Item 2 above. The same should apply to this condition.

DEQ does not understand what this comment pertains to. The provisions in the draft permit, Section VI, Operating Plan, subsections A, B, C, D, and E were written in accordance with DMM's application and the appropriate sections of IDAPA 58.01.13. The regulations may intend to provide DEQ with the discretion to not be overly restrictive, but it does not allow DEQ to be less protective.

Additional discussion between DMM and DEQ is appropriate to resolve this comment.

If DMM is referring to the stipulation in VI.B.5, which states, "The tailings impoundment must be underlain by a leak detection/leak collection system. An Idaho Registered Professional Engineer with expertise in leak detection and collection systems, impoundments and shall supervise all designs and construction of the leak detection and leak collection system, and provide Quality Assurance and Quality Control that the materials, placement of materials and construction meet or exceed the manufacturer's specifications and the design and construction specifications," then DEQ can respond to that comment here.

Engineering drawings, designs, specifications, and any appropriate narrative describing the storage capacity of the leak detection and collection system must be signed and stamped by a Professional Engineer registered in the state of Idaho, and submitted to DEQ for review, approval, and, if appropriate, incorporation in the Final Permit. Each and every page of the engineering drawings, designs, and specifications intended "For Construction Purposes" must be stamped and submitted for DEQ's engineering review and approval. The permit will stipulate that the leak detection and collection system will be monitored twice daily: once in the morning and once in the evening at approximately twelve hour (12) intervals. The permit will provide that whenever the volume of water in the collection system can be pumped, it will be pumped back to the milling facility for use and subsequent treatment prior to discharge to the tailings impoundment.

Comment/Response 4.

Commenter: Desert Mineral Mining, LLC

VI. Operating Plan, Item 6: Same comment for optimizing the crushing circuit.

DEQ assumes that DMM's comment pertains to VI.A.6. This provision is consistent with the Rules for the Prevention of Air Pollution. Although this provision may be removed as permit criteria, DMM must comply with those Rules or it may be issued a Notice of Violation and subject to administrative or civil actions.

DEQ will remove this specific stipulation from the permit. However, DEQ will not remove the caveat that DMM must comply with all local state and federal laws applicable to its operations.

Violations of IDAPA 50.01.01, *Rules for the Control of Air Pollution in Idaho* may, therefore, be considered condition for revocation of the permit.

Comment/Response 5.

Commenter: Desert Mineral Mining, LLC

VI. Operating Plan, Item 7: DMM believes this condition is unreasonable, and inconsistent with other conditions which allow DMM to utilize an EPA-approved laboratory.

DMM is correct; this was not part of DMM's application and may be overly restrictive according to DEQ's existing authorities.

DEQ will make changes in the document to reflect that DMM must use an EPA approved and certified laboratory for its sample analyses.

Comment/Response 6.

Commenter: Desert Mineral Mining, LLC

DMM believes a leak detection system is unnecessary and unwarranted, given ground water conditions and the fact that the pond is not in close proximity to surface waters. We propose that the existing down-gradient monitoring well (Well #GWC) is adequate to insure environmental protection, if the pond is constructed according to design plans and specifications.

This provision was specifically prescribed by DEQ's professional engineering and professional geology staff. These individuals have specific expertise in engineering planning, designs, specifications, and construction of waste storage and treatment facilities similar to the proposed tailings impoundment.

Engineering drawings, designs, and specifications, and any appropriate narrative describing the storage capacity of the leak detection and collection system, must be signed and stamped by a Professional Engineer registered in the state of Idaho, and submitted to DEQ for review, approval, and, if appropriate, incorporation in the Final Permit. Each and every page of the engineering drawings, designs, and specifications intended "For Construction Purposes" must be stamped and submitted for DEQ's engineering review and approval. The permit will stipulate that the leak detection and collection system will be monitored twice daily: once in the morning and once in the evening at approximately twelve hour (12) intervals. The permit will stipulate that plans and specifications must include the system or methods for effluent removal and recirculation. The permit will provide that whenever the volume of water in the collection system can be pumped, it will be pumped back to the milling facility for use and subsequent treatment prior to discharge to the tailings impoundment.

Comment/Response 7.

Commenter: Desert Mineral Mining, LLC

DMM believes that Condition #7 under Item B, "Neutralization and Discharge of Spent Ore and Process Water" is unreasonable and unnecessarily costly. DMM proposes, alternatively, that the construction phase for the pond require sign-off and stamping by a Registered Idaho Engineer. The engineer should determine the schedule for inspection. In the end, the engineer must sign the as-build drawings.

Section IV.B.7 will be rephrased to provide that "A qualified professional, who is under direct supervision of the Idaho Registered Professional Engineer responsible for signing and stamping the Construction Designs and As-Built Designs, must supervise placement and compaction of all foundation materials, construction of the leak detection and collection system, construction of the tailings impoundment, construction of the mill foundation and its secondary containment systems, and provide sufficient documentation of quality assurance and quality control measures utilized for those placements and constructions."

Comment/Response 8.

Commenter: Desert Mineral Mining, LLC

Item #9 in this section of the draft permit is also unnecessarily restrictive. Once the tailings meets the 0.2 mg/l WAD cyanide criteria, the standard has been achieved. Requiring additional volatilization and UV degradation by requiring the tailings which have already been neutralized to "stand hallow" is unreasonable, and also restricts the operator from a practicable placement sequencing plan.

Section IV.B.8, not IV.B.9, addresses the specific criteria for neutralization. According to the plans and specifications for the tailings impoundment, a two foot lift (2') placed (across the entire bottom of the impoundment) will contain approximately 4,700 cubic yards (approximately 7,000 tons) of spent ore and process wastewater. This represents over seventy days (10 weeks) of operations of the facility. Placing the spent ore in a two foot lift across the entire bottom of the tailings facility will not just provide for additional volatilization and UV degradation of the cyanide, it will also help to significantly reduce the need for the addition of discharge systems for treated process waste water.

The Final Permit will stipulate that the point of compliance is at the end of the discharge pipe from the plant for all chemical criteria. The stipulation for volatilization and UV degradation will be removed.

Comment/Response 9.

Commenter: Desert Mineral Mining, LLC

Item #9 of the same section requires that DMM monitor TSS, hardness, sulfate, arsenic, iron, copper and silver, in addition to nitrate, WAD cyanide and pH. The metals monitoring described here will be accomplished as a "characterization" under the proposed TCLP start-up monitoring phase. TSS has no purpose with regard to sampling in the pond. It is DMM's position that only WAD cyanide and pH should be monitored, given that this is a total containment-zero discharge facility. The additional monitoring proposed serves no purpose and is unnecessarily costly.

DEQ believes that DMM is addressing IV.B.10, not IV.B.9. TSS may not be an appropriate parameter for analyses, but DEQ does not concur with the rest of DMM's argument. TCLP analyses enable the operator to evaluate the leachability of the tailings over the long term. TCLP analyses are not a validation process for the effectiveness of DMM's neutralization process, as DMM has proposed in its application on Page 13. This requirement is not only consistent with DMM's application, but it is consistent with the IDAPA 58.01.13.

TSS will be removed from the criteria, but the rest of the parameters will be required, and the effluent must be analyzed for these parameters prior to discharge of effluent or tailings to the tailings impoundment to verify that the criteria set forth in Section VIII. M. are met.

Comment/Response 10.

Commenter: Desert Mineral Mining, LLC

With regard to "Condition C. Ore Processing Chemicals", DMM believes that under Item 2 the stemmed wall requirement should only apply to that portion of the mill building that provides secondary containment for process solutions. Stem-walling the entire perimeter serves no functional purpose and is unnecessarily expensive.

DEQ agrees with this comment, as long as DMM's operating plans are modified to stipulate that all spills of chemicals and other deleterious materials that occur outside of primary and secondary containment will be immediately cleaned up, neutralized appropriately, and disposed. Furthermore, an accurate log should be kept relative to such spills and should include when they occurred, who responded to them, when response occurred, and what the final disposition is of the spilled materials and of any soil or water that was contaminated by the spill.

In response to this and similar comments, DMM has submitted, for DEQ review and approval, engineering drawings, designs, and specifications for the mill building that depict these secondary containment features (stemmed walls). The designs and specifications were prepared "For Construction." Engineering drawings, designs, and specifications for the mill building have been signed and stamped by a Professional Engineer registered in the state of Idaho. The plans and specifications provide for appropriate sealing of seams and cracks. The Revised Operating Plans also provide for routine maintenance and cleanup of all spills of chemicals and other deleterious materials from the secondary containment, either returning them to the processing or treatment circuits of the mill, or sending them to appropriate disposal off-site.

Comment/Response 11.

Commenter: Desert Mineral Mining, LLC

DMM desires to have noted in the permit that chemical usage (Item 3) may vary, based on test processing results.

DEQ concurs with this comment.

DEQ will make the notation in Section IV.C.3. that some of the chemicals listed for use may change. However, the Emergency Spill Response Plan, the Material Safety Data Sheets, and monitoring plans must be kept current with respect to the changes and their respective procedures for response and cleanup.

Comment/Response 12.

Commenter: Desert Mineral Mining, LLC

Regarding Section VII, "Water Management Plan", DMM concurs that the most practicable approach to BMP's is to locate the individual practices and features during construction, and to show them on the as-built plans and specifications.

DEQ visited the site on December 10, 2004 and observed that substantial construction activities had recently occurred at the site without implementation of any Best Management Practices (BMPs). DEQ is requiring that milling facilities, tailings impoundment systems, pipes, chemical storage facilities, offices, housing, pit designs, access routes, and water management systems is constructed and maintained according to DEQ approved plans and specifications.

Comment/Response 13.

Commenter: Desert Mineral Mining, LLC

DMM strongly disagrees that seven surface monitoring sites and six ground water wells are needed or reasonable for the scale of operation proposed. The entire project, as proposed, would only affect 10 newly disturbed acres. The processing facility is less than 5 acres. This is a small project that is located in a single sub-drainage. One monitoring well (already constructed) and three surface water sites are adequate. The proposed program by IDEQ is costly and unnecessary. Also, DMM maintains that samples should be sent to an EPA-approved laboratory. We have utilized a facility in Boise (Analytical Laboratory), and continue to believe this is a reasonable approach.

DEQ concurs that the number of surface and groundwater monitoring locations may be excessive, and, based on DEQ's recent site visit, it appears that the required monitoring can be significantly reduced.

DEQ will change the permit requirements for surface water monitoring locations to one on Blacks Creek, three on Woodtick Creek and one on Bender Creek.

DEQ will remove the ground water well monitoring requirement and replace it with monitoring requirements for the leak detection/leak collection system. Specifically, DMM will be required to check the leak detection/collection system every twelve hours, preferably each morning and evening, to determine if effluent is present. If the effluent is present and can be removed, it will be removed, sampled for the compliance criteria, and recycled. A log will be kept of this monitoring, and the results will be included. In any event that effluent is removed, sampled, and recycled, DEQ will be notified within 24 hours by phone and within five working days in writing. The notification will include the volume of effluent removed from the system, when the water quality analyses may be expected back from the laboratory, and what, if any, mitigation is being implemented to reduce leakage. Upon completion and receipt of the water quality analyses, all results will be immediately (within 24 hours) forwarded to DEQ for evaluation and discussion.

Comment/Response 14.

Commenter: Desert Mineral Mining, LLC

It is DMM's position that only the WAD cyanide criteria shown in the Water Quality Criteria table would apply in the processed ore tailings pond. This needs to be made clear in the permit.

DEQ disagrees. Although these criteria are best applied at the end of the pipe entering the tailings impoundment, DMM is responsible for meeting water quality criteria in local surface or ground water influenced by the mining operations, ore processing facilities, tailings impoundment, chemical and fuel storage, or storm water runoff.

These clarifications will be made in Section VIII.M.

Comment/Response 15.

Commenter: Desert Mineral Mining, LLC

With regard to Section IX, "Transportation and Spill Response", the following is noted: Item A - petrochemical and maintenance fluids are required onsite to construct the facilities. We agree that a Transportation and Spill Response Plan should be developed prior to transport of chemicals, petrochemicals and maintenance chemicals to the site. However, we also submit for your consideration the following concerns:

Item C – DMM will provide suppliers with copies of the plan. It will be their responsibility to be familiar with the plan.

DMM provided for this stipulation on Page 20 of its application. Where DMM has proposed a "Spill Prevention and Transportation Plan" in its applications as a provision for the permit, it is up to DMM to require suppliers be familiar with this plan.

This permit criteria will not be changed.

Comment/Response 16.

Commenter: Desert Mineral Mining, LLC

Item G.1 – It is not practical for DMM to perform safety inspections on all transport vehicles before they travel to the site. It is also unreasonable and needs to be eliminated from the permit.

DEQ agrees that it is impractical for DMM to perform these inspections. However, DMM provided for this stipulation on Page 20 of its application, and it is up to DMM to require suppliers to inspect all transportation vehicles before they travel to the site.

The permit will stipulate that DMM will require that suppliers inspect all vehicles prior to transportation of materials to the site.

Comment/Response 17.

Commenter: Desert Mineral Mining, LLC

Item G.6 – This is not practicable, and would require DMM to unnecessarily "stockpile" chemicals and fuel at the site. The condition should instead require chains, where advisable, as is the case for other rural roads in the state.

DEQ does not agree. As discussed by the Mountain Home Highway District (Wayne Tindall, January 11, 2005), "Blacks Creek Road is a seasonal road and is posted NO WINTER MAINTENANCE. This road could be, and has in the past, been closed for up to four months, depending on the severity of weather." This poses two water quality protection issues relative to this permit. The first issue is that if the roads aren't maintained, deleterious materials cannot be safely transported to the site, and any spills related to that transportation will enter surface or ground water. The second is that successful transportation of fuels and other maintenance fluids to the site is critical to maintaining and operating systems (pumps etc.) for water management, process wastewater treatment, and, subsequently, water quality protection at the mine and mill site. As such, DMM must provide contingencies for situations as a matter of providing water quality protection.

Unless DMM provides an appropriate alternative for transportation during inclement weather, or when roads are snow covered and/or icy, this requirement will remain in the permit.

Comment/Response 18.

Commenter: Desert Mineral Mining, LLC

Item G.7 – This condition is outside the jurisdiction of the Cyanidation Rules as is Item G.6, and should be eliminated.

DEQ does not agree. As discussed by the Mountain Home Highway District (Wayne Tindall, January 11, 2005), "Blacks Creek Road is a seasonal road and is posted NO WINTER MAINTENANCE. This road could be, and has in the past, been closed for up to four months, depending on the severity of weather." This poses two water quality protection issues relative to this permit. The first issue is that if the roads aren't maintained, deleterious materials cannot be safely transported to the site, and any spills related to that transportation will enter surface or ground water. The second is that successful transportation of fuels and other maintenance fluids to the site is critical to maintaining and operating systems (pumps etc.) for water management, process wastewater treatment, and, subsequently, water quality protection at the mine and mill site. As such, DMM must provide contingencies for situations as a matter of providing water quality protection.

Unless DMM provides an appropriate alternative for transportation during inclement weather, or when roads are snow covered and/or icy, this requirement will remain in the permit.

Comment/Response 19.

Commenter: Desert Mineral Mining, LLC

Item H – A specific transportation schedule may not be possible to develop until operations have been conducted over a startup period (6-8 weeks). This condition for signing should be modified accordingly.

Item H refers to inventories of spill response supplies, not schedules and signage. With respect to schedules and signage, however, DEQ does not agree. General delivery times and the notices of heavy truck traffic can be, and must be, provided as a local traffic advisory. This is common practice for all extractive industries that use public roads.

The requirement will be refined to stipulate that signs will be posted locally as advisories for the public of when it might expect to see heavy trucks on public roads in proximity to the mine. The requirement will also be changed to stipulate that a schedule for delivery will be developed and submitted as an inclusion in the final "Spill Prevention and Transportation Plan." This plan must be completed and submitted for approval by DEQ no later than 8 weeks from the beginning of operations.

Comment/Response 20.

Commenter: Desert Mineral Mining, LLC

Condition X. Access and Security: Immediate entry access points will be gated at public roads in the area of the processing facility.

Considerable concerns have been voiced by local ranchers regarding access control of cattle and wildlife to the site, particularly access to the tailings impoundment.

The permit will require fencing to exclude access of these animals from the tailings impoundment. DEQ will require secure containment and lock down of all chemical storage. DEQ also will require 24 hour, seven day a week, presence of personnel at the facilities and their ability to communicate with local law enforcement or emergency response agencies.

Comment/Response 21.

Commenter: Joseph Baldwin PG – Hydrogeologist, DEQ

RE: Comments on Desert Mineral Mining LLC Cyanidation application

The process facility water balance is incomplete. It is not possible to evaluate water volumes in the ore processing facility, potential flow volumes from the processing plant to the tailings storage facility, or the volume of process water plus precipitation to be stored in the tailings storage facility.

Agreed.

DMM has completed water balance calculations for operations of its ore processing, mining and waste facilities, and fire suppression systems. The volume of these consumptive uses and their appropriation is critical to DMM's ability to operate, and

therefore were calculated. DMM submitted the water balance calculations for DEQ's review.

Comment/Response 22.

Commenter: Joseph Baldwin PG – Hydrogeologist, DEQ

There are no engineering plans that describe transmission of tails from the processing facility to the tailings storage facility, and process water from the tailings storage facility back to the processing plant, so pipe sizing, pipe materials, spill prevention measures, or potential freeze protection for pipe(s) between the processing plant and tailings storage facility can't be evaluated. Assuming there will be an intermittent rather than a continual discharge from the processing facility to the tailings storage facility, details should be provided on how the pipe(s) will be drained when not in use.

Agreed.

In response to this and similar comments, DMM has submitted, for DEQ review and approval, engineering drawings, designs, and specifications for the mill building that depict these secondary containment features (stemmed walls). The designs and specifications were prepared "For Construction." Engineering drawings, designs, and specifications for the mill building have been signed and stamped by a Professional Engineer registered in the state of Idaho. The plans and specifications provide for appropriate sealing of seams and cracks. The Revised Operating Plans also provide for routine maintenance and cleanup of all spills of chemicals and other deleterious materials from the secondary containment, either returning them to the processing or treatment circuits of the mill, or sending them to appropriate disposal off-site.

Comment/Response 23.

Commenter: Joseph Baldwin PG – Hydrogeologist, DEQ

Page 7 – The application states that the processing facility site does not drain to Wood Creek. However, during a December 10, 2004 site visit, it was observed that a road has been constructed across the drainage divide so that some site drainage will flow from the northwestern part of the facility area on the Blacks Creek side to the Wood Creek/Boise River side.

Agreed.

Approved best management practices and monitoring requirements will be incorporated in the permit to provide for storm water and other discharges to Wood Creek.

Comment/Response 24.

Commenter: Joseph Baldwin PG – Hydrogeologist, DEQ

Page 16 – The spent ore will essentially be a sterile mineral sand with some residual nitrogen derived from cyanide neutralization. It won't contain a biological component, which is a necessary requirement for a compost material.

Agreed. Development of an effective evapo-transpiration cap to cover the tailings impoundment at closure will require significant soils amendments, including the addition of organics, although the tailings may provide a growth medium.

DMM will be required to add approximately 600 tons of compost (or suitable organic soils amendments) per acre of area within the footprint of the reclaimed ore processing facility and tailings impoundment.

Comment/Response 25.

Commenter: Joseph Baldwin P.G. – Hydrogeologist, DEQ

Page 28 – Surface water monitoring records indicate that there has been elevated nitrate-nitrogen at stations SW-6 and SW-8. Samples should be collected from these stations to determine if elevated NO3-N is still present.

Agreed. The required surface water monitoring plans should be sufficient to determine if nitrates are still present in the system. However, treatment and monitoring of the process waste waters and the leak collection/detection system should demonstrate whether or not there is a risk for additional nitrates to enter surface or ground water.

The monitoring plans will be modified to include Nitrates as $NO_2 + NO_3$.

Comment/Response 26.

Commenter: Mark Mason P.E., DEQ, Wastewater Management Section

This review comment has to do with the stability of any foundation proposed for this DMM site. Due to the nature of the on-site materials, which are composed of decomposed, weathered granitic soils, all foundations should be placed on "cut" sections. Further, no foundations should be placed on any type of fill section, engineered or not. This type of soil cannot be effectively compacted, and even the proposed one-foot lifts compacted to 95% standard Proctor will do little, if any, to attain a stable base for any kind of sustained load. The risk of failure associated with constructing a tailings impoundment on a constructed fill foundation as proposed and currently being constructed is absolute, meaning that this impoundment cannot possibly maintain stability, and, therefore, the lining system will also fail in the very short term.

Agreed. Geotechnical data on the soils has as yet not been reviewed by DEQ. However, it appears from inspections of the fill material that it is not appropriate to found either the mill building or tailings impoundment systems on fill material as this would most likely cause deferential settling, which can damage concrete floors in the mill and the liners at the impoundment.

Therefore, foundations of facilities, including the ore processing building and tailings impoundment, will not be allowed on fill material except where geotechnical analyses demonstrates that subsurface materials below the "cut" is competent to found these facilities. However, the engineering specifications for Liner "bedding" placement will be retained, as bedding is critical to protection of the liner from punctures.

Comment/Response 27.

Commenter: Dallas .J. Snyder, Elmore County

Cyanide, isn't this what they use to put Prisoner's on Death row to death with?

That is our understanding.

Comment/Response 28.

Commenter: Dallas .J. Snyder, Elmore County

What kind of concentration will it take to hurt someone?

The state of Idaho's drinking water standards for weak acid dissociable cyanide is 0.20 mg/l.

Comment/Response 29.

Commenter: Dallas .J. Snyder, Elmore County

Why can't I open the PDF located on this page http://www.deq.state.id.us/applications/newsapp/shownews.cfm?event_id=996 , does someone not want us to see these applications? Is there something more to hide?

The file is available, but you must use Adobe Reader®, which is available free at http://www.adobe.com, to view the contents of the file. The Web page containing the application and draft permit was revised to direct the public to this free application.

Comment/Response 30.

Commenter: Arlen DeMeyer, Boise

I would like to point out that I did not receive a copy of the proposed permit and DMM's application until December 22nd; neighbors Clay and Betty Miller and Vera Stewart and Joan Maglecic have yet to receive theirs as of December 30th. And I would point out that none of the interested groups, organizations or parties that I have spoken with over the past three weeks have heard boo about this blight on the landscape except the State Department of Water Resources.

Public Notices and a press releases were issued to the Mountain Home News and Idaho Statesman on October 4, 2004, when DEQ first received an application for a permit by DMM; again on November 4, 2004, when DMM modified their application; on December 4, 2004, when DEQ determined to issue a draft permit for the public to review and comment; and again on January 4, 2005, when DEQ extended the public comment period. DEQ also posted the application, draft permit, Public Notices and press releases on the Internet (at http://www.deq.state.id.us/Applications/NewsApp/shownews.cfm?event_id=996) for easy access.

Comment/Response 31.

Commenter: Arlen DeMeyer, Boise

TOPIC 1. THE EARTHQUAKE ASPECT

SOMEONE IN AUTHORITY NEEDS TO INSIST THAT DMM'S OPERATION IS SAFE FROM POSSIBLE EARTHQUAKE DAMAGE.

DEQ's engineering staff has evaluated the engineering designs and specification for the construction of the cyanidation facilities. The existing engineering criteria is based on acceptable engineering concepts, including those to provide for stability during seismic events. However, where the tailings impoundment is being proposed as a permanent disposal facility, the likelihood of a Modified Mercalli VII event, occurring in proximity to the project site, significantly increases towards being high, not low.

DEQ has approved modifications of plans and specifications for a "down sized" tailings impoundment structure, which will accommodate less than 22,000 tons (or less) of tailings and meet the engineering criteria. DMM's narrative for the engineering designs and specifications must specifically confirm that the designs for the tailings impoundment will provide continued stability if a Modified Mercalli VII event occurs in the project area.

Comment/Response 32.

Commenter: Arlen DeMeyer, Boise

TOPIC 2. HAZARDOUS CHEMICAL STORAGE

In addition, DMM apparently intends to store on site in a separate building, a one month's supply of a witches' brew of hazardous chemicals including 800 lbs of sodium cyanide, 250 lbs of flocculants, 6,000 lbs of calcium oxide (lime), and 1,000 lbs of sodium hypochlorite with an undisclosed amount of acid stored separately from where sodium cyanide is stored. They do not mention how much mercury and hydrogen peroxide would be used and stored for a month's production. Shouldn't they be required to do so as a condition of the permit?

By Rule, the amounts of chemicals transported and used at the site do not need to be listed in the application or permit. However, the draft permit stipulates that the Emergency Spill Response Plan, Storage Facilities, and Material Safety Data Sheet (MSDS) list are kept current and address all chemicals transported, used, and stored at the site. Transportation, storage, and use of chemicals that have not been provided for in the Emergency Spill Response Plan, appropriately stored, and listed in the MSDS sheets will be considered a violation of the permit.

DMM has submitted, and DEQ has subsequently approved, final changes in the engineering drawings to show that the chemical storage will be placed adjacent to the mill building on a contiguous concrete pad. This is appropriate for secondary containment of the chemical storage facilities and will be incorporated in the permit. Other than this addition to the plans, DEQ will not be amending the Draft Permit per this comment.

Comment/Response 33.

Commenter: Arlen DeMeyer, Boise

Also, the hazardous chemical storage building (only one) is shown positioned right next to the milling and processing building, and shares a common wall with the safety station located

above and to the right (Figure 4: General Facilities Siting Arrangement). IS THIS WISE? IS THIS SAFE IN CASE OF EARTHQUAKES? The permit, on the other- hand states, "Chemical reagents for the processing operations shall be stored in a separate building on a lined, concrete surface." (per. p. I IS THERE SOME CONFUSION HERE?

There is, apparently, some confusion regarding the location of chemical storage in a separate building. It appears, from Figure 4, that chemical storage is in a room attached to the "Mill Building."

DMM has specifically identified the location of the chemical storage units and that these share the concrete flooring of the mill building.

Comment/Response 34.

Commenter: Arlen DeMeyer, Boise

The Application also states: "Included as Appendix 2 are Material Safety Data Sheets (MSDS) for all chemicals to be used at the site (app. P. 5) "with a list of chemicals used per ton of ore; mercury and hydrogen peroxide are not listed- p. 5. Estimate of chemical use per ton of ore), even though both are included in the text of the list of major constitutients (app., p. 20). Nor are they listed in the permit at #3. Chemical Usage Per ton of Ore (Estimated) (p. pg 12), although they are listed in the preliminary Transportation and Spill Response Plan. In addition, the MSDS for lime is incomplete: there is no name, address, emergency phone number as stated there would be on pg. 2 of appendix 2 of the application.

By Rule, the amounts of chemicals transported and used at the site do not need to be listed in the application or permit. However, the draft permit stipulates that the Emergency Spill Response Plan, Storage Facilities, and Material Safety Data Sheet (MSDS) list are kept current and address all chemicals transported, used, and stored at the site. Transportation, storage, and use of chemicals that have not been provided for in the Emergency Spill Response Plan, appropriately stored, and listed in the MSDS sheets will be considered a violation of the permit.

DEQ will not be making any amendments to the Draft Permit per this comment.

Comment/Response 35.

Commenter: Arlen DeMeyer, Boise

The proposed permit states: "C. Ore Processing Chemicals:

1. Transportation, use, handling, and ultimate disposition of all chemicals including ore processing chemicals, maintenance fluids and other deleterious materials shall be consistent with the Material Safety Data Sheets (MSDS) contained in Appendix two of the Application. The MSDS must be kept current and maintained in a ready and useful format at the facility, (permit, p. 11-12). There are no MSDS for mercury or hydrogen peroxide in Appendix 2 of my copy of the application. **MSDS for such maintenance fluids as lubricating oil, hydraulic fluid, gear oil, 90-weight grease, power steering fluid, transmission fluid, soap, industrial strength solvents, and protective suit decontamination chemicals or cleaners are MISSING. DMM only briefly discusses the disposal of used motor oil (app. p. 5) but not other maintenance fluids. To permit DMM to submit MSDS in a later Spill Prevention Containment and Countermeasure Plan (SPCC Plan) after the facility has been built but prior to startup is putting the**

cart before the horse, and does not permit the public to review and comment upon this proposal UNACCEPTABLE AND GROUNDS FOR AN INJUNCTION. THE APPLICATION IS INCOMPLETE AND SHOULD BE REJECTED ...

DEQ agrees. By Rule, the relative amounts of chemicals transported and used at the site do not need to be listed in the application or permit. However, the draft permit stipulates that the Emergency Spill Response Plan, Storage Facilities, and MSDS list are kept current and address **all chemicals** transported used and stored at the site. Transportation, storage and use of chemicals that have not been provided for in the Emergency Spill Response Plan, appropriately stored, or listed in the MSDS sheets will be considered a violation off the permit. MSDS sheets that are available for any chemical products used at the site must be contained in the MSDS list. If there are substances, for which MSDS sheets are available, then DMM must compile these and include them with the other MSDS Sheets.

DEQ will not be making any amendments to the Draft Permit per this comment.

Comment/Response 36.

Commenter: Arlen DeMeyer, Boise

If your response is that MSDS's for all materials listed as major components need only be supplied subsequent to the granting of the permit, my response would be, how can members of the public, residents of the area, recreationists, and hunters who frequent the area reasonably assess the hazards involved in the cyanidation process without complete data which should have been provided, by DMM to you and made available by you to the public in a timely fashion with adequate time for comment (N.B. Not all of us have internet access or read the Mtn. Home News or keep track of the legal notices)? Granting a permit under such conditions would, in my opinion and others, be grounds for seeking, and winning, a court injunction requesting a stay of execution and a denial of the permit. I think I can safely say that Terzo of Luguna Beach will be staying in Laguna Beach. THE APPLICATION IS INCOMPLETE AND SHOULD BE DENIED.

Although DEQ understands your point of view, we do not agree with your conclusions. MSDS sheets can only be kept current and accurate and up to date if, at the time of procurement of products, DMM obtains the current MSDS sheet for a specific product. The general public will be denied access to the chemical storage and processing facilities, and therefore does not necessarily need to know what is being stored and used at the site. However, it is appropriate for DMM to coordinate with or advise potential emergency first responders (such as the Sheriff's department, the National Interagency Fire Center, etc.) of the materials they may encounter at the site if an emergency response is initiated.

The final permit will require notification of potential emergency response teams of chemicals that may be expected to be transported to, and used or stored at the site, so that the first responders may consider these in their approach to any emergency at the site.

Comment/Response 37.

Commenter: Arlen DeMeyer, Boise

TOPIC 3

EARTHQUAKES, HAZARDOUS CHEMICAL STORAGE, ROAD SPILLS AND EMERGENCY RESPONSE PLAN

I'm sure your agency would not wish to be blamed for endangering public health and safety by granting a permit without adequate public comment and review from the public and concerned public agencies such as:

1. The Ada County Highway District
2. The Elmore County Highway District
3. The Ada County Sheriff & HazMat Response Chief
4. The Elmore County Sheriff & HazMet Response Chief
5. The Boise National Forest
6. The Idaho Department of Lands
7. The Idaho Department of Parks and Recreation
8. The Boise InterAgency Fire Center, and
9. The Bureau of Land Management

I wish to point out that cell phone and radio communication in Black's Creek Canyon does not work and probably does not work along most stretches of BCR north of the site until you reach Willow Creek Hill, 9.25 miles North of the site. If communications were knocked out at the site, or if people were trapped by landslides above or below the site, help may be hard to get.

Agreed. The Final Permit will stipulate that DMM must provide for adequate communications with emergency services and local residents. As such, DMM will be required to submit details for its proposed communications system, including a prioritized call down list, starting with First Response systems, followed up by contacting local residents to let them know what state of emergency exists and how it may affect them. This requirement must be met prior to issuance of a Final Permit.

Comment/Response 38.

Commenter: Arlen DeMeyer, Boise

I understand an Emergency Response Plan will be granted after the permit is granted and before the site begins processing ore. THIS IS UNACCEPTABLE. PUBLIC HEARINGS SHOULD BE HELD BEFORE THE PERMIT IS GRANTED TO EXAMINE THE RAMIFICATIONS OF A HAZARDOUS CHEMICAL MINING SITE ON NEIL SUMMIT IN A MOUNTAINOUS AREA WITH ONLY LIMITED ACCESS AND POOR COMMUNICATIONS. Developing an ERP after the facility has been built is putting the cart before the horse. Changes need to be made to Black's Creeks Road, with signage for sharp curves, reduced speed limits, mileage postings so spills along the road can be identified as to location of guardrails or crash barriers installed on sharp curves all of which cost money. The ECHD particularly has a tight budget and will not be pleased at the added expense especially if it should become necessary to rail all the way to Neil Summit as it is paved in Ada County are going to love that idea since BCR up Black's Creek Canyon is used to trail up to and back from summer grazing in the Boise National Forest and cattle do not like to walk on paved roads).

A revised emergency response plan has been submitted for approval by DEQ prior to issuance of a Final Permit. DMM must provide for adequate communications with emergency services and local residents. As such, DMM will be required to submit

details for its proposed communications system, including a prioritized call down list, starting with First Response systems, followed up with local contacts for emergencies, such as major chemical spills, transportation accidents, and wildfires.

Comment/Response 39.

Commenter: Arlen DeMeyer, Boise

The application as it now stands is incomplete and deficient in information about what would be involved in and how DMM would respond in an emergency either at the site or along Black's Creek Road. The only immediate restriction imposed on them in the permit is a notification to IDEQ WITHIN 24 HOURS. Now isn't that precious? WHAT ABOUT THE REST OF US? DMM seems to think that no one lives around here; that drives cattle up and down the Black's Creek Road; that hundreds of recreationists use the Danskin Mtn. Trail System on weekends just North and East of the site whose only access from Boise, Idaho's largest population center)iv the Black's Creek Road, and that ranchers may have cattle grazing in the Boise National Forest North and East of the site in the Lucky Peak State Recreation Area (state land) North and West of the site, and on private land South, Southwest and Southeast of the site.

A final emergency response plan has been submitted for approval by DEQ. DMM must provide for adequate communications with emergency services and local residents. As such, DMM will be required to submit details for its proposed communications system, including a prioritized call down list, starting with First Response systems, followed up with local contacts for emergencies ,such as major chemical spills, transportation accidents, and wildfires.

Comment/Response 40.

Commenter: Arlen DeMeyer, Boise

I cannot begin to imagine what that big plastic waste bag sunk into the bedrock of Neil Summit covered with 2-3 feet of dirt would do during even a mid-intensity quake PARTICULARLY AFTER THE 20 YEAR MANUFACTURER'S LIMITED WARRENTY EXPIRES IN 2029, or WHEN THE INSTALLER-S 10 YEAR LIMITED WARRANTY AGAINST DEFECTS IN WORKMANSHIP AND WATER INTEGRITY EXPIRES. It's not even a whole bag--but one made in strips with seams fused on site which could fail 10 years before the material itself fails. THIS POINT ALONE JUSTIFIES DENIAL OF THE APPLICATION.

The criteria for installation and disposal of the lining system is based on practices established by both the mining and solid waste industries for several decades. These practices have become accepted standards. However, because DEQ agrees that there are still questions regarding the potential impacts to surface and ground water, DEQ will be evaluating the leaching characteristics of the tailings to determine what those risks are during operations. If significant risks are determined, DEQ may require amendments to the closure plans for the tailings impoundment.

DEQ and the Idaho Department of Lands (IDL) have agreed that the final configuration of the tailings facility will be contingent upon analyses of the leaching

characteristics of all of the tailings. Until the analyses are complete, DEQ and IDL are requiring that the liner materials will be ripped and removed where they are exposed along the embankments, and the tailings will be capped and covered with an evapo-transpiration cap, consisting of at least two feet of top soil, with a minimum thickness of 8 inches of top soil placed on the final surface. Per comment by the Idaho Department of Fish and Game, the area will be seeded with a mixture of mountain sagebrush, at 0.1 lbs. per acre and 5 lbs. per acre of each of the following grasses: bluebunch wheatgrass, Idaho fescue, squirreltail, and Sandberg bluegrass. In addition, the following forbs should be included, at 0.67 lbs. per acre each: small burnet, Dutch white clover, and alfalfa (2 lbs. per acre total forbs in the seed mix).

Comment/Response 41.

Commenter: Arlen DeMeyer, Boise

Incidentally, the lower stretch of Willow Creek, Arrowrock Reservoir East to Rattlesnake Creek and the South Fork of the Boise River are a migratory pathway and spawning grounds for bull trout which is on the endangered species list. I guess we can imagine why DMM insists on locating its facility on the Black's Creek side of the Summit rather than the Wood Creek side. THIS ALONE JUSTIFIES REQUIRING DMM TO RE-SUBMIT ITS APPLICATION.

Of the Natural Resource Trustees only the Idaho Department of Fish and Game has provided any information that demonstrates that wildlife including Bull Trout and/or their habitat may be affected by DMM's proposal.

Listing of a species under the Federal Endangered Species Act is not a factor in evaluating applications according to the IDAPA 58.01.13. No modifications of the draft permit will be made in response to this comment.

Comment/Response 42.

Commenter: Arlen DeMeyer, Boise

TOPIC 4.

GROUNDWATER WELLS

The DMM application contains one assertion that can only be construed as an outright lie, i.e. Section 3d. Ground water characteristics in Mineral Processing Facility Location. No known wells for drinking water exist within 5 miles of the site (app., p. 10). Even a casual drive up Black's Creek Road, along the Mayfield Road to the Slater Creek Road and then down it to the Indian Creek Road to the Stage Stop on I-84 would reveal quite a number: THERE ARE IN FACT 12 GROUNDWATER WELLS USED FOR DRINKING WATER WITHIN FIVE MILES OF THE SITE, and there are AN ADDITIONAL I2 WITHIN TEN MILES (NOT COUNTING THE 10-.12 at DANSKIN MTN. RANCHES) or MORE

DEQ agrees that the application does not accurately reveal all of the ground water wells within ten miles of the site. However, DEQ believes that the requirement of source controls, in the form of the leak detection/leak collection system, sufficiently addresses the risks to surface and ground water quality.

The Draft will not be modified to respond to this comment.

Comment/Response 43.

Commenter: Arlen DeMeyer, Boise

TOPIC 5. GROUNDWATER RIGHTS AND WATER USAGE

There are no privately owned water rights in Section 13, T2N, R4E, the site of the mine. The only water right in Section 13 is for surface water, stream flow and ponds owned by the Forest Service. There are no privately owned water rights of any kind in sections immediately to the south of the site. The BLM owns surface and stream rights on BLM lands several of which are adjacent to or nearby. (see Map / which is a color enhanced, property ownership delineated version of the permit map.

Although DEQ is specifically requiring that water balance calculations are completed for the milling operations and domestic facilities, including evaporation in the tailings impoundment, dust, and fire suppression systems, water rights is not a factor in evaluating an application under IDAPA 58.01.13.

DEQ will not be addressing water rights issues in the permit for DMM's operations.

Comment/Response 44.

Commenter: Arlen DeMeyer, Boise

TOPIC 6. HAULING AND TRAILING CATTLE ON BCR

DMM SHOULD NOT BE PERMITTED TO SCHEDULE DELIVERIES OF HAZARDOUS CHEMICALS OR MATERIALS OF ANY NATURE WHEN AREA RANCHES ARE HAULING CATTLE IN OR OUT., E.G.:

DEQ does not regulate the schedule or use of public roads.

The Final Permit will require DMM to determine when its shipments of materials and supplies will occur, and to provide signage along the transportation route as an advisory to other local traffic. DEQ has determined that this action is consistent with the objectives of providing protection for surface or ground waters along the access corridor.

Comment/Response 45.

Commenter: Arlen DeMeyer, Boise

TOPIC 7.

FENCING

There is some confusion about just what is to be fenced and with what kind of fencing. Figure 4 in the application shows a fence around the tailings pit and a locked and gated fence around the site. Section 2 i. Security says, "The process area would be fenced and locked at all times. DMM will have trained personnel on site at all times during operations. The storage facility fencing will also be deer proof fencing" app. p. 6.

The permit states: The impoundment shall be fenced to restrict access by wildlife." I assume this means both deer and elk. Does DMM know or realize that an elk-proof fence must be at least 8 feet high and more substantial than a conventional barbed wire fence?

The permit should also require that the entire 133 acres of the patented mining claim be fenced, posted and maintained twice a year to keep both people, cattle, and hunters off the property.; I understand that there are unexpected holes around there left over from mining or drilling which could break a cow's or horse's or a hiker's leg, and since DMM will be digging slot cuts, operating dump trucks, cats, backhoes, etc, we would not want a person or animal getting run over. In addition, DMM should be required to restore the original fence along the National Forest boundary to the South to prevent cattle grazing in the forest from getting onto BCR and walking down Neil Summit looking for water in Black's Creek at the bottom. There used to be a cattle guard across BCR with an access gate on the right for trailing cattle. DMM & the Forest Service should consult and cooperate in closing the Three Point Mtn, Trailhead so that cattle cannot use the trail to reach Black's Creek Road. The local grazing rights owner, Joan Maglecic, should be consulted first.

DEQ does not have criteria for fencing, but DEQ believes that exclusion of wildlife is best implemented around the immediate perimeter of the ore processing facilities fuel and chemical storage, and tailings impoundment.

The Final Permit will contain requirements for complete fencing of the tailings impoundment and ore processing facilities for human and wildlife exclusion

Comment/Response 46.

Commenter: Arlen DeMeyer, Boise

It seems they were burying sagebrush and roots in pits on site, and even under the area where the impoundment pit/pond will be, even though the Earthwork Rules state: “A. Clear site to be occupied by permanent construction of roots, brush, and other objectionable material and debris [;]…..C. Remove waste materials from site and dispose [;] D. Remove debris and other combustible materials from site and dispose of off-site; on-site burning is not permitted.” (Application, p.02200-3) Apparently their chipper/shredder has been working overtime (they promise that “vegetation will be stripped from the area of disturbance. It will be chipped and stockpiled for use in future re-vegetation programs.” (Application, p16). As of Saturday, January 29th, not a stick or branch of sagebrush was left in the facility area.

These are issues that are being addressed as part of a resolution to IDL’s letter of noncompliance, and that must be resolved before issuance of a Final Permit. Although the top soil has not been stockpiled as it should have been, it will be before construction of the foundations is approved. Unfortunately, the woody debris will be incorporated directly into the top soil and later used as capping material instead of being chopped and then incorporated as DEQ preferred.

No changes will be made to the draft permit per this comment.

Comment/Response 47.

Commenter: Arlen DeMeyer, Boise

The MSDS for sodium cyanide provided by DMM in their application, dated 5/03/94 (1st pg) is no longer valid: "This Material Safety Data Sheet is valid for three years" (last sentence last page), is, until 1997. It has lapsed. And it seems, ICI Acrylies, a business of ICI Canada, Inc. is no longer owned by ICI Canada, Inc., having been sold in 1999 to Ineos Acrylics, LTD, Hawkslease, Chapel Lane, Lyndhurst, Hampshire, 90437FF, United Kingdom, with a primary U.S. Office at 2925 Briarpark, Ste 870, Huston, Texas, 77042. The emergency phone number remains operable. (See Appendix 2)

DEQ agrees. By Rule, the relative amounts of chemicals transported and used at the site do not need to be listed in the application or permit. However, the draft permit stipulates that the Emergency Spill Response Plan, Storage Facilities, and MSDS list are kept current and address **all chemicals** transported used and stored at the site. Transportation, storage and use of chemicals that have not been provided for in the Emergency Spill Response Plan, appropriately stored, or listed in the MSDS sheets will be considered a violation off the permit. MSDS sheets that are available for any chemical products used at the site must be contained in the MSDS list. If there are substances for which MSDS sheets are available, then DMM must compile these and include them with the other MSDS Sheets.

DEQ will not be making any amendments to the Draft Permit per this comment.

Comment/Response 48.

Commenter: Arlen DeMeyer, Boise

The 1989, 1990, and 2004 water samples are deficient, misleading, missing part of the analyses for one sample period, incomplete, and suspicious in their choice of sampling sites, to wit:

1) There are no water quality analyses for any springs or seeps. Six springs are plotted in Figure 7, and flow amounts noted for 4/13/89; five were noted to be dry on 8'4'89. Spring (11) in the draw north of the site to be mined, presumably below the mine adit (SW-6) was noted to be dry in the spring but running in August, unusual behavior for a spring. And Spring (10) located on the right branch of Black's Creek presumably near the site of the old hotel/boarding house is said to be dry in the fall. This is unusual since Joan Stewart/Maglecic whose cattle graze the Grouse Creek and Bender Creek allotments in the Boise National Forest, says that this is one of her best springs with 3 troughs which never run dry. But it was dry for them.

Figure 7, not even of the 5 seeps located closest to the area to be mined on the east slope of the summit. One would think springs and seeps would be particularly of interest since they would be examples of the less deep ground water. Contamination might occur or show up in them firs, but no samples were taken and no analyses are reported.

2) There is only one ground water analysis reported (on 9/14/2004) for a new well drilled in 2004 and it is mislabeled in the text as GW-B. "In 1990, GW-B was installed. This well is in the southwest corner of the Daisy/Overlook claims where the DMM facility would be located…

DMM collected a ground water sample from the GW-B monitoring well in August of this year. Water quality results are included as Appendix 5 of this document." (Application, p.11)

However, the analysis included in Appendix 5, dated 9/14/2004, from Analytical Laboratories, Inc. collected and sampled by M. Moore is labeled Source of Sample: Centennial Mine GW-C (well water). Of the six ground water sites plotted on Figure 7, it is the only one with reported analyses. There are non from 1989 – NONE!

DEQ has already addressed this issue in its response to your previous comments. Evaluation of environmental baseline data is not a critical factor if engineered source control measures are sufficiently protective of surface or ground water. Furthermore, DEQ has determined that moving monitoring locations closer to the potential sources provides for more expeditious response to spills or releases.

The draft permit will not be modified per this comment.

Comment/Response 49.

Commenter: Arlen DeMeyer, Boise

And, GW-C is nowhere near the facility site being located on the West Branch of Black's Creek on the valley floor on the opposite side of Black's Creek Road below Neal Summit. The analysis of water from GW-C tells us nothing about the groundwater below the facility site – Nothing!

Although the text refers to 35 exploration logs surveys showing water level depth at (11-98') throughout the site (application, p. 10) no water quality analyses are reported for any of the, let alone the other 5 plotted on Figure 7.

3) In addition, data is missing. The Laboratory Report for the stream water analysis for May 25, 1989 contains only page 1 of 2. Page 2 containing the results for sites # 5,6,7, and 8 is missing both from my by mail Xerox copy and the IDEQ's web-page copy of the application. The logs show that samples were taken. Where are they?

DEQ has already addressed this issue in its response to your previous comments. Evaluation of environmental baseline data is not a critical factor if engineered source control measures are sufficiently protective of surface or ground water. Furthermore, DEQ has determined that moving monitoring locations closer to the potential sources provides for more expeditious response to spills or releases.

The draft permit will not be modified per these comments.

Comment/Response 50.

Commenter: Arlen DeMeyer, Boise

4) Stream flow samples began too late to catch early snow melt and runoff. The earliest samples were taken on May 16, 1989; snowmelt typically begins mid-to-late February, but can occur as early as mid-to-late January. In an attempt to discover what conditions were like in 1988-89, I consulted "Meteorological Data for 1988 and 1989" that after a ¼" of rain in mid September

5) Their stream flow sample logs are padded.

6) There is no main stem stream flow sampling site for Wood Creek Corresponding to the mainstem sampling site for Black's Creek..

7) There is something odd going on at # SW-6, the mine adit, and #SW-4, the sample site in the same draw below #SW-6 and spring (11).

8) Where are the stream flow water analyses for 2004? Wood Creek from below the mine adit draw ran all summer according to Joan Stewart/Maglecic. I observed it myself in July, August, October, and November. It's running now as of January 29th. DMM states in the application, p. 10, "A surface water quality program is planned to be re-started for the DMM project during Winter 2004, once precipitation events begin to occur….. This program will commence when stream flows resume, probably in November or December 2004." Well it's February. Where's the Data?

9) Wood Creek and it's tributaries is a 303(d) listed stream, as of 2000 (see SubBasin Assessment for Upper Boise River Watersheds, IDEQ, Hydrologic Catalog Units: 17050111 and 17050113, Southwest Idaho.), as is Willow Creek which Wood Creek joins at the Willow Creek Campground. The South Fork of the Boise River between Arrowrock Dam and Anderson Ranch Dam is a special resource water, as designated by the legislature. Page 22 of the SubBasin Assessment lists toxic substances in which the state has adopted to protect aquatic life that are relevant in the Upper Boise River SubBasin.": Arsenic, copper, lead, mercury, and zinc. (see Table 5 in SubBasin Assessment, p. 22 for values). However, in the contemplated permit, only arsenic and copper are required to be tested for, clearly and over-site on someone's part (permit, p.20)

It might not be a bad idea to include a beaver pond or two as sampling sites whenever DMM gets around to it.

It would be a major mistake to ignore this data, and gives the special status of Wood Creek both for fish (regular as well as bull trout in it's lower reaches) and for recreation, it would be wise to have some complete up to date water quality information in hand before issuing a permit

DEQ has already addressed this issue in its response to your previous comments. Evaluation of environmental baseline data is not a critical factor if engineered source control measures are sufficiently protective of surface or ground water. Furthermore, DEQ has determined that moving monitoring locations closer to the potential sources provides for more expeditious response to spills or releases.

The draft permit will not be modified per these comments.

Comment/Response 51.

Commenter: Arlen DeMeyer, Boise

At first, I thought they were just being coy about how much water they would be going to use, but now I think they don't really know themselves. There are 4 water uses:

DMM has completed water balance calculations for operations of its ore processing, mining and waste facilities, and fire suppression systems. DMM submitted the water balance calculations for DEQ's review.

Comment/Response 52.

Commenter: Arlen DeMeyer, Boise

A tremendous amount of water will be used for dust abatement (application, p.14, "A water truck will be employed as necessary to control dust")

DMM has determined that a way of reducing its consumption of water is to utilize dust suppression chemicals such as magnesium chloride. This consumptive use for water, therefore does not fit into the water balance calculation.

Comment/Response 53.

Commenter: Arlen DeMeyer, Boise

It was announced at the meeting on January 20th that DMM now plans to buy water and truck it to the site.

At the least, DMM should be required to keep a fully loaded tanker/fire truck on site ready to go in case of fire during officially designated fire seasons.

Agreed.

DMM has completed water balance calculations for operations of its ore processing, mining and waste facilities, and domestic water uses. DMM has submitted the water balance calculations for DEQ's review.

Comment/Response 54.

Commenter: Arlen DeMeyer, Boise

No deliveries of diesel fuel should be accepted during periods of high fire danger. A 60' wide fire guard should be plowed and maintained yearly around the entire facility. Diesel storage tanks should bee located away from the perimeter of the site, and not on the exterior edge next to the Boise National Forest as now apparently contemplated in their preliminary site plan (see Figure), and the whole facility area should be a "no smoking" zone.

Although DEQ concurs with the concept that there are safe and appropriate times and conditions for transportation of deleterious materials, DEQ does not have the authority to stipulate times for use of public access routes.

No changes will be made to the draft permit per this comment.

Comment/Response 55.

Commenter: Arlen DeMeyer, Boise

Routing diesel fuel and hazardous chemical deliveries along the entire length of the Black's Creek Road thu Ada County and then up Black's Creek Canyon into Elmore County

potentially threatens one of the largest contiguous areas of "Old Growth" sage brush in Ada County, which has been up to now a prime area for sage grouse, a threatened species.

In their desire to minimize the impact of their deliveries on an already busy road in their data sheet distributed at the January 20th meeting, DMM now claims there will be only two deliveries per week; that's still 104 per year, or 40 during fire season (5 months – June-October). "Those people" can't count since there are at least 11 different items listed for monthly deliveries, plus daily trips by the water truck, garbage collection (Elmore County has twice monthly garbage pick-ups) sewage collection, food deliveries and trips back and forth to town.

There is an alternative delivery route that is less traveled, has fewer curves and steep hills, is further from streams and sage grouse habitat and would without a doubt be a better road to the mine. And that is the Indian Creek Mayfield Road to the intersection with the Black's Creek Road, then up the canyon to Neal Summit. Since all DMM's equipment will apparently be diesel powered (why? can't they afford wind or solar energy, at least for electricity?), in the winter in particular, they should be required to use the least polluting fuel possible.

Although DEQ concurs with the concept that there may be other routes for transportation of deleterious materials, DEQ does not have the authority to stipulate these routes.

No changes will be made to the draft permit per this comment.

Comment/Response 56.

Commenter: Arlen DeMeyer, Boise

I know I forgot something. There's a better place to store or leave their tailings than up there on Three Point forever. I refer to American Ecology's hazardous waste dumps near Grandview in Owyhee County. At least it's site is lined with 5 layers of plastic and protective fabric, with three feet of compacted clay and 500 feet of impermeable clay under the site.

Although it is not anticipated at this time, wastes that result from the decommissioning, decontamination, and dismantling of the ore processing equipment and facilities may require collection and disposal of wastes that will be more appropriately disposed in a facility such as American Ecology's landfill.

The Final Permit will stipulate that at closure all milling equipment and plumbing of the milling facilities will be dismantled and decontaminated, and that the resulting waste products will be characterized, treated, and disposed according to their characteristics.

Comment/Response 57.

Commenter: Al Van Vooren, Southwest Regional Supervisor, Idaho Department of Fish and Game

The Idaho Department of Fish and Game (Department) has reviewed the reclamation plan for the proposed Centennial Mine. The proposed mine is located approximately 25 miles east of

Boise, on Three Point Mountain near the headwaters of Blacks Creek and Wood Creek. The Department has the following comments and concerns for your consideration.

It is our understanding that all the solutions used in the milling process will not be exposed to the environment. The tailings however, would be placed outside in a lined storage facility after the cyanide has been neutralized (<0.2 mg/l free cyanide).

This area is big game winter range. The general area around Three Point Mountain receives high use by mule deer (around 1,000 mule deer in an average winter) and moderate use by elk (around 200 elk in an average winter). This activity, if conducted year round as proposed, will have a negative impact on wintering deer and elk and their habitat due to disturbance.

The Rules do not provide for "a negative impact" effect on wildlife. The Rules do, however, provide for the protection of surface and ground water quality, which DEQ believes will have been appropriately addressed if it is determined that issuance of a permit is appropriate.

No changes will be made in the draft permit relative to this comment.

Comment/Response 58.

Commenter: Al Van Vooren, Southwest Regional Supervisor, Idaho Department of Fish and Game

The stated reclamation goal of the project is to return the area to a "productive post-mining land use following completion of all temporary pilot-processing operations. The primary land uses of the project area include: agricultural, wildlife habitat, and limited recreational activities. The post-mining land use will continue to emphasize these land use activities." In order to restore this area to a productive post mining land use, the Department strongly recommends changing the proposed seed mixture. Crested wheatgrass and intermediate wheatgrass do not provide any benefit for wildlife, especially wintering mule deer and elk. The Department recommends using a mixture of mountain sagebrush at 0.1 lbs. per acre, and 5 lbs. per acre of each of the following grasses; bluebunch wheatgrass, Idaho fescue, squirreltail, and Sandberg bluegrass. In addition, the following forbs should be included at 0.67 lbs. per acre each: small burnet, Dutch white clover, and alfalfa (2 lbs. per acre total forbs in the seed mix).

Land disturbing activities are often a major factor in the establishment and spread of invasive plant species. These species reduce the quality and productivity of wildlife habitat. The reclamation plan does not describe specific actions that will be taken to control the establishment and spread of invasive plant species. There is only a general reference to the use of herbicides. The Department recommends that a detailed invasive species control and monitoring plan be submitted outlining what chemicals "will be used as well as other actions that will be taken both during and after mining to control the establishment and spread of invasive plant species. The plan should also describe the monitoring that will occur and the measures that will be used to determine success or failure. The Department recommends that the monitoring of the revegetation efforts be included in this plan and that all vegetation monitoring be conducted for a minimum of five years after mine closure. Contingencies should be included in case the initial seeding or invasive species control efforts fail (e.g. multiple years of seeding if needed). This will help ensure the success of the seedlings and the invasive plant species control efforts.

The Department is assuming that a total of 14.22 acres will be reclaimed. Five acres will be reclaimed prior to or during the mining operation (as mitigation) and 9.22 acres of disturbance associated with this test project will be reclaimed upon completion of the project. These recommendations apply to the entire 14.22 acres that will be reclaimed.

DEQ and the Idaho Department of Lands (IDL) have agreed that the final configuration of the tailings facility will be contingent upon analyses of the leaching characteristics of all of the tailings. Until the analyses are complete, DEQ and IDL are requiring that the liner materials will be ripped and removed where they are exposed along the embankments, and the tailings will be capped and covered with an evapo-transpiration cap, consisting of at least two feet of top soil, with a minimum thickness of 8 inches of top soil placed on the final surface. Per comment by the Idaho Department of Fish and Game, the area will be seeded with a mixture of mountain sagebrush, at 0.1 lbs. per acre and 5 lbs. per acre of each of the following grasses: bluebunch wheatgrass, Idaho fescue, squirreltail, and Sandberg bluegrass. In addition, the following forbs should be included, at 0.67 lbs. per acre each: small burnet, Dutch white clover, and alfalfa (2 lbs. per acre total forbs in the seed mix).

Comment/Response 59.

Commenter: Mr. and Mrs. Dennis Maglecic, Boise

I do not think that we need it I'm totally against it. At the top of Three point if they put three ponds on the Wood Creek side and something goes wrong it will run off in to the South Fork & on the Blacks Creek side it will go down to Black Creek then to Kuna.

Based on the initial review of the application, and input from the public, DEQ is including requirements for surface and ground water protection that go well beyond the immediate area of the proposed operations. It is DEQ's professional opinion that if DMM implements and maintains these requirements, risks of surface and ground water contamination will be eliminated.

Numerous examples of these additional requirements may be found throughout this Public Comment Response Document.

Comment/Response 60.

Commenter: Mr. and Mrs. Dennis Maglecic, Boise

We run cattle in the Black Creek and Wood Creek form June 1- November 1 and if the ponds are not "fenced", the water would kill our cattle and a $25,000 dollar bond would not cover them. So it would have to be fenced "For cattle can not read".

Not only is cyanide deadly to cattle but diesel oil and gas if left around & not covered right. And what about the run off from the mining it will run into the creeks and muddy things up.

If a pond should ever break it would go into streams and the "Wells" down stream, as we are only about 2-3 miles down the road from them.

I do no think that their bond is large enough $25, 000.00 would not pay for any thing now days. It should be at least 200,000.00 dollars or more.

The requirement of a $25,000 bond is specifically tied to ensuring neutralization of process wastes and waste water if the facilities are abandoned. DEQ's authorities do not extend to requirements of personal and property liability or catastrophic environmental liability insurance.

By Rule, DEQ cannot change its requirement of a $25,000 bond.

Comment/Response 61.

Commenter: Mr. and Mrs. Dennis Maglecic, Boise

We trail cattle up and down the Black Creek road that is "open range". With more trucks the more likely we could get something hurt or killed on the road and who is going to keep the road up use the tax payers there is no winter up keep on it.

Should there be a spilled truck of diesel or gas or cyanide on the road every thing would and will go into the creeks and go to Black Creek and then to Kuna then Nampa and etc.

What if cattle get into the Ponds and should get killed, who will pay for cattle. Cattle are my living. I'm all for someone making a living but not at the expense of the one's who are already here. And we have been here for over 65 years.

And if there is a fire that is started a the mine and it was to get out? Who would pay for cattle and feed lost?

The requirement of a $25,000 bond is specifically tied to ensuring neutralization of process wastes and waste water if the facilities are abandoned. DEQ's authorities do not extend to requirements of personal and property liability or catastrophic environmental liability insurance.

By Rule, DEQ cannot change its requirement of a $25,000 bond.

Commenter: Mr. and Mrs. Dennis Maglecic, Boise

Plus who in 5 years is going to put the land back the way it was. I hope it's not use the tax payer. For if you go and look at what they have done in the past it is not good. I'm not for it.

DEQ and the Idaho Department of Lands (IDL) have agreed that the final configuration of the tailings facility will be contingent upon analyses of the leaching characteristics of all of the tailings. Until the analyses are complete, DEQ and IDL are requiring that the liner materials will be ripped and removed where they are exposed along the embankments, and the tailings will be capped and covered with an evapo-transpiration cap, consisting of at least two feet of top soil, with a minimum thickness of 8 inches of top soil placed on the final surface. Per comment by the Idaho Department of Fish and Game, the area will be seeded with a mixture of mountain sagebrush, at 0.1 lbs. per acre and 5 lbs. per acre of each of the following grasses: bluebunch wheatgrass, Idaho fescue, squirreltail, and Sandberg bluegrass. In addition, the following forbs should be included, at 0.67 lbs. per acre each: small burnet, Dutch white clover, and alfalfa (2 lbs. per acre total forbs in the seed mix).

Comment/Response 62.

Commenter: Linda Valentine

A $25,000 bond is not sufficient to cover the cost of environmental damages if the company goes bankrupt or refuses to clean up the site. The company should be required to place the amount necessary to completely clean up the site in escrow until the operation is completed and the natural condition be restored.

The requirement of a $25,000 bond is specifically tied to ensuring neutralization of process wastes and waste water if the facilities are abandoned. DEQ's authorities do not extend to requirements of personal and property liability or catastrophic environmental liability insurance.

By Rule, DEQ cannot change its requirement of a $25,000 bond.

Comment/Response 63.

Commenter: Linda Valentine

Site monitoring should include periphyton (algae) samples.

DEQ does not agree with this comment.

No changes will be made to the monitoring requirements.

Commenter: Linda Valentine

55 gallons is too much diesel to spill before requiring the company to submit a report.* This should be reduced to 25 gallons minimum or less if directly spilled into a drainage.

DEQ Agrees. The requirement for reportable quantities is 25 gallons, not 55 gallons.

The Emergency Response Plan must be modified to reflect the reportable quantity of 25 gallons.

Comment/Response 64.

Commenter: Linda Valentine

The 10mg/l is too much cyanide in the water as a standard amount before a report is necessary.* The Water Quality Standard is 5.2 Micrograms/l, The cyanide level should be consistent with the water quality standards and anything over that amount should be reported immediately.

DEQ does not agree. The groundwater quality (Drinking Water) standard is 0.2 parts per million, the acute cold water biota water quality criteria is 0.022 parts per million, and the chronic cold water biota water quality criteria is 0.0052 parts per million.

The criteria will not be changed.

Comment/Response 65.

Commenter: Tim Collias

Upon receiving and reviewing the records regarding Desert Mineral Mining's LLCs application for permit to construct and operate a cyanidation facility at Three Points Mountain (aka), Centennial Mine, I have serious concerns and objections.

By way of history, my family has ranched in the Blacks Creek area since about 1910. We have seen many mining operations come and go. We have seen the consequences of mining go uncorrected. We have seen many overstated proposals and undercapitalized ventures.

Draft permit CN-000030 proposes many ideas. Past projects have had problems satisfying requirement of governing entities and neighboring land owners. This project appears to be no different. In the 12/01/04 DEQ response to DMM's permit, I would request additional examination and analysis in the following areas:

VI. Operating Plan, Item 2: Why would requirements be any different for a small scale or pilot facility? Where in the law does it give consideration for less restrictive criteria? How will this be addressed? This is my concern with VI. Operating Plan, Item 5 and Item 6 as well.

In the mid 1990s, the Idaho Independent Miner's Association and some of their constituency requested the Director DEQ to initiate rule making that provided less onerous requirements for facilities that were intended to operate short term for metallurgical tests, or process very low tonnages. They convinced the Director that, because of the relative scale, the risks to human health and the environment were considerably less than that of large scale mining operations and therefore the rules should be less prescriptive. Hence the authorities actually exist in the Rules as modified in 1997.

Per our discussions with you on February 10, 2005, DEQ believes that the comments on VI. Operating Plan Item 5 and Item 6 has been responded to adequately above in DEQ's response to DMM's comments on the same sections. Specifically:

These provisions were specifically prescribed by DEQ's professional engineering and professional geology staff. These individuals have specific expertise in engineering planning, designs, specifications, and construction of waste storage and treatment facilities similar to the proposed tailings impoundment.

DMM has submitted engineering drawings, designs and specifications and narrative describing the storage capacity of the leak detection and collection system, which have been signed and stamped by a Professional Engineer registered in the state of Idaho. These will be incorporated in the Final Permit. Engineering drawings, designs and specifications "For Construction Purposes" were submitted for DEQ's engineering review and approval. The permit will stipulate that the leak detection and collection system will be monitored twice daily: once in the morning and once in the evening at approximately twelve hour (12) intervals. The permit will stipulate that facilities must be constructed consistent with these plans and specifications, and operations must include the system or methods for effluent removal and recirculation. The permit will provide specific criteria that triggers pumping of water in the collection system. When it can be pumped, effluent in the leak detection sump will be pumped back to the

milling facility for use and subsequent treatment prior to discharge to the tailings impoundment.

Comment/Response 66.

Commenter: Tim Collias

VI. Operating Plan, Item 7: Where is the data to support DMM's objections as unreasonable and unwarranted? "DMM believes a leak detection system is unnecessary and unwarranted, given ground water conditions." How can this statement be supported?

DEQ concurs, and after numerous discussions, DMM has conceded to this point and is submitting the appropriate designs and specifications for DEQ review, and, if appropriate, approval and inclusion as permit requirements.

Comment/Response 67.

Commenter: Tim Collias

The landowners have believed the water table in the area is inconsistent. How can consistency and safety be guaranteed in all areas affecting water, water quality, runoff, etc?

DEQ does not disagree with the landowners relative to the difficulty in defining ground water quantity, flows, and directions. This is, however, why DEQ believes that the most effective methods for ensuring protection of ground and surface water quality is for DMM to design and construct facilities to treat process wastes and wastewaters to compliance criteria before discharging to a tailings facility, and to provide the contingency of a leak detection and leak collection system beneath the tailings facility in case there is some operator error or accident during the waste treatment that results in an unauthorized discharge to the tailings impoundment.

The Final Permit for DMM will require the leak detection/collection system, its monitoring and maintenance, recycling and re-treatment of any effluent collected in that system, and reporting to DEQ of any quantity and quality of effluent removed from the system. This information will not only validate the treatment of the effluent, but it can be used to determine if repairs need to be conducted on either the lined tailings impoundment or waste treatment systems.

Comment/Response 68.

Commenter: Tim Collias

Even with regular and effective testing, how would this be monitored, by whom, what training will they have? How will this work or not work and with what potential consequences? Again my concern on DMM's stance on this and other guidelines as unnecessarily restrictive or excessive displays an attitude of operation that is problematic.

With the final designs of the leak detection and collection system, DMM has submitted the engineering designs for the extraction point and devices, the frequency of monitoring provided by these systems, how samples of effluent will be preserved and submitted for laboratory analyses, and how the results will be reported. Because sample analyses will not be available at the time that effluent is present and should, therefore, be removed, the effluent will be required to be pumped back into the mill for use or treatment. Subsequent to the analyses, the water quality will provide data for a number of purposes, including the long term leaching potential of tailings through which it must have passed on its way to the leak detection collection system.

Comment/Response 69.

Commenter: Tim Collias

Item #9 has concerns about mining and building requirements. DMM takes the position these are unnecessary for economic reasons. Are these issues negotiable or is there a standard?

DMM has conceded on this point and is submitting the appropriate designs and specifications for DEQ review, and, if appropriate, approval and inclusion as permit requirements. Some of these plans and specifications are also required by the Idaho Department of Lands and Elmore County. Each organization has specific mining or building requirements that are pertinent to DMM's construction of facilities.

Comment/Response 70.

Commenter: Tim Collias

Regarding Section VII "Water Management Plan" DMM "strongly disagrees that seven surface monitoring sites and six ground water wells are needed or reasonable for the scale of operation proposed." How can water management, water quality, water safety be addressed without sufficient ground water wells and monitoring sites if the project is so small?

As partially stated previously, DEQ believes that the most effective means of protecting surface and ground water is for DMM to focus their resources in source control measures and redundant backup systems, such as the leak detection collection system. In some instances, such as on Three Points Mountain, monitoring wells and surface water sampling points only serve to let you know that a discharge has occurred and is impacting areas far from a source. However, it is more logical to expect that leaks or discharges that are discovered close to the source can be more easily contained and cleaned up. Generally speaking, this strategy reflects the fact that the further you get away from a source, the more widespread a contaminant plume may become, and the number of receptors increases exponentially. Therefore:

The Final Permit will require treatment and analyses of process wastes and waste water before discharge to the tailings impoundment, and that impoundment will have a leak detection collection system.

Comment/Response 71.

Commenter: Tim Collias

What is the feasibility of this project anyway, if DMM is not accountable to meet the necessary requirements of any size mining operation? Lack of size or costliness should not be used to negotiate a lowering of standards compromising safety concerns.

DEQ has already addressed this.

Comment/Response 72.

Commenter: Tim Collias

Another area of concern is the importance of a sufficiently stable base for the construction of the impoundment. Why is this area suitable with its soil composition or is it not?

Would another area be more suitable? Is this area any different than other areas where there have been stability concerns? What measures are fundamental? I was of the opinion that without certain practices, the impoundment would be increasingly unstable. In your email, "From Bruce Schuld to Richins" dated 12/13/04, 11:30 a.m., you raise concerns about the location of the impoundment, construction problems of filling over top soil and sage brush. Your concerns are " these aren't typically accepted engineering practices for maintaining stability of a tailings impoundment, nor preventing discharges." How will this be addressed? Especially in light of DMM's objection of a leak detection system, the combination of poor unstable systems and no leak detection seems to be poor judgment with significant possible consequences.

DEQ agrees with our previous assessment and your understanding of it. The recent practice of cutting and filling an area where the tailings facility is to be located is unacceptable.

DMM has completed geotechnical evaluations that provide acceptable engineering criteria for removing the current fill, sorting materials to remove organic matter (brush, stumps, logs, roots,), other deleterious materials, and large particles greater than 6 inches in diameter, such as rocks, and placing the modified fill in one foot (1') lifts and compacting each lift to a 95% proctor density until a level site is achieved. The Final Permit will require that DMM must remove all fill previously placed in and around the tailings and ore processing building footprint. The material must be screened to remove all organic matter and particles may not place the foundation of the tailings facility on topsoil fill containing sage brush and other large woody debris.

Comment/Response 73.

Commenter: Tim Collias

Previous ventures have been under financed with an eye to attracting investors and transferring permits to larger entities. This is another concern area, who is truly accountable and/or liable? In the permit proposal, this is Section XV, who could DEQ or anyone else go to for corrections, damages, or liabilities?

Although DEQ's authorities allow it to seek cost recovery for additional costs associated with achieving permanent closure of facilities in the event of abandonment, DEQ has not identified any entity other than Desert Mineral Mining LLC for this. It might be argued that the current private property owner would become liable if Desert Mineral Mining were dissolved.

It is my opinion that a cyanidation facility 20 miles from Boise is impractical, poor judgment, and unsafe. I have grave concerns to see a stated reference in the November 22, 2004 memorandum from Bruce Schuld to Barry Burnelle and Mike McGowen "RE. Request for review, Desert Mineral Mining LLC Draft Cyanidation Permit." "Per direction by Jim Yost I have processed the request by Desert Mineral Mining LLC in a very expeditious manner and determined that DEQ should issue a draft permit for public review and comment. However, I am also making every attempt to ensure that the final permit is complete and protective, which was also a very clear directive from Jim." **My concerns are, if this permit were to be granted, how can we say the review has been complete and protective and expeditious? How much additional time, public comment, and scrutiny are needed to meet appropriate technical, engineering, and public concerns? It seems to me that this " small operation" embodies many large issues that should not be overlooked.**

By extending the public comment period, responding to comments, and continuing DEQ's engineering and geotechnical review of the Draft Application, DEQ has considered this in finalizing the Director's determination. Ongoing input from the proponents, the public, and DEQ's staff has resulted in a permit that is protective of many of the concerns, particularly for surface and ground water quality that have been expressed by local landowners and the general public.

Comment/Response 74.

Commenter: Tim Collias

DMM to my knowledge has made no direct effort to even communicate with their neighbors in the Blacks Creek area. The Blacks Creek area has potential continued agricultural value, increased recreational value and increased growth close to Idaho's capitol city.

By extending the public comment period and holding a public meeting, DEQ believes that this communication gap has, at least, been partially closed. DEQ agrees, however, that the process should continue, and, from DEQ's perspective, it will continue as far as DEQ's regulatory authorities can take it.

The Final Permit will require that DMM compile a call-down list of all local residents to be contacted in the event an emergency situation develops relative to transportation or operating activities at the mine. In such an event, the local residents and ranchers will need to be contacted and appraised of any state of emergency immediately following prior contacts with emergency response agencies and first responders.

Comment/Response 75.

Commenter: Tim Collias

In a recent Statesman editorial 12/31/04, questions about bonding were raised from multiple sources, including the Idaho Mining Association. Upcoming legislation may address this issue, is there a reason to move expeditiously?

Although the term "expeditiously" has been used numerous time to describe DEQ's work on the process, DEQ has granted the applicant due process relative to the time frames defined in the rules. Regardless of what is occurring in legislation or current rule making processes, DEQ made a Director's determination on March 4, 2005.

Comment/Response 76.

Commenter: Lori Bevan-Gardiner, Boise

I am writing to voice my concerns regarding the proposed cyanide mine in Elmore County. The recent history of cyanide spills concerns me. The potential for more spills and accidents could lead to pollution of Blacks Creek and affect nearby ground water. A number of jurisdictions have banned dangerous mining practices and others are seeking to implement similar bans. Cyanide is lethal and although Desert Mineral Mining LLC has outlined safety procedures in its permit application, spills and leaks happen. I do not have the engineering background to refute their safety procedures, but the growing number of countries that have banned cyanide mining because of dangers and accidents, tells me that opening a cyanide mine in Elmore County is not worth the risk.

Aren't there alternatives to mining gold than cyanidation?

DEQ's authorities do not extend to determining if other technical alternatives exist for mining or metallurgical treatment of ores.

Commenter: Lori Bevan-Gardiner, Boise

Has a procedure been put into place in case a spill happens?

DMM has been required to develop and implement an emergency response plan that provides for initial response through cleanup of discharges and spills that occur during transportation of fuels and chemicals or during their use at the mine.

Commenter: Lori Bevan-Gardiner, Boise

How long do proposed liners stay intact?

It depends on the placement of the liner. When exposed to the open air and sunlight, ultraviolet degradation can destroy the integrity of liners in ten to twenty five years. However, when liners are buried beneath fill and protected from heavy equipment, their integrity can last from fifty to a hundred years.

Comment/Response 77.

Commenter: George J. Collias

In Section 2 "Overview of The Proposed Small Mineral Cyanidation Facility" page 5, it is stated that sodium hypochlorite will be stored in a locked area near the sodium cyanide supply. It it also stated, "All forms of acids will be stored away from the location where sodium cyanide is stored." The sodium cyanide MSD sheet states in Section 10, "Cyanide contact with strong oxidizers such as nitrates and chlorates may cause fire and explosion." Since sodium hypochlorite is also an oxidizer, shouldn't it be also be stored away from the cyanide to prevent fire and explosion?

You are correct. Large quantities of incompatible chemicals should not be stored in situations where they can react with one another. There are areas of the operating facility that are compatible with the mixing of process wastewater and oxidizers to eliminate or neutralize the concentrations of cyanide in the waste water.

The Final Permit must improve the clarity regarding storage requirements of chemicals. Sodium cyanide must be isolated from the possibility of contact with any strong oxidizer.

Comment/Response 78.

Commenter: George J. Collias

In Section 2 "Overview of The Proposed Small Mineral Cyanidation Facility" page 6, it is stated that "A 30% water mixture (of sodium hypochlorite) would be used to neutralize spent cyanide-treated ore prior to the tailings impoundment." This is assumed to be 30 wt% sodium hypochlorite. A 30 wt% solution of sodium hypochlorite is extremely rare, extremely high, and quite unstable. Concentrated sodium hypochlorite solutions lose 35% or more of their activity after 60 days storage at ambient temperature. What action will DMM take to assure that adequate amounts of sodium hypochlorite are actually being fed to meet cyanide destruction requirements?

The sodium hypochlorite MSD sheet page 1 Ingredients section in Appendix 2, however, states that a < 6 wt% solution of sodium hypochlorite solution will be used. Which type of sodium hypochlorite will be used, the 30 wt% version or the 6 wt% version?

This is a typo and will be corrected. The concentration of sodium hypochlorite that will be used is 6% by weight.

This typo must be corrected in the MSDS sheet maintained on the site.

Comment/Response 79.

Commenter: George J. Collias

In Section 3D "Overview of The Proposed Small Mineral Cyanidation Facility" page 10, it is stated, "Geologic formations in the area are not considered significant aquifers." What authority provides the definition of a "significant aquifer"? What is the definition of a "significant aquifer"?

DEQ did not agree with DMM's use of the relative terminology "significant aquifer" to characterize the geology of the site. On the contrary, DEQ recognizes that the area is not so much an aquifer but an important recharge area for groundwater sources utilized downgradient from the site. That is why, after significant public comment and internal technical review, DEQ has proposed more restrictive water quality protection plans be included in a final design for the ore processing, waste water treatment, and waste disposal facilities.

Comment/Response 80.

Commenter: George J. Collias

How many mineral cyanidation facilities has DMM installed?

How many mineral cyanidation facilities is DMM currently operating?

What are the locations of the currently operating DMM mineral cyanidation facilities?

According to DMM, this will be its first facility brought into production.

Comment/Response 81.

Commenter: George J. Collias

Have any of the DMM mineral cyanidation facilities had permit violations?

If "yes", what permit violations have occurred in DMM mineral cyanidation facilities?

According to DMM, this will be its first facility brought into production.

Comment/Response 82.

Commenter: Roy Heberger, Boise

First, please, consider the arguments made in today's edition of The Idaho Statesman lead editorial, page 6 Local) for extending the deadline for comments on the proposed project.

My experience with cyanide leaching for purposes of gold extraction is that there are always problems associated with loss of containment of the toxic chemicals used in the gold extraction process. Grouse Creek Mine in Jordan Creek, tributary to the Yankee Fork of the Salmon River, comes immediately to mind. Whether the project has proposed heap leach or vat leach processes, containment ponds associated with the process are always under designed. Water management becomes a serious problem and containment is lost. Also, regardless of what is claimed, there is no pond liner that is leak free. That is a given.

DEQ agrees and is requiring provisions for more stringent engineering designs of a leak detection and collection system, and for monitoring.

Comment/Response 83.

Commenter: Roy Heberger, Boise

Cyanide, chemicals used to neutralize it, and byproducts of neutralization are deadly, especially in the aquatic environment.

For this project to proceed the State of Idaho first should identify a level of bonding that is consistent with the real cost of clean up. It should then seek the regulatory means to secure such a level of bonding from the project proponents. It should also consider the true costs of mitigation and compensation for damages to public resources.

Call it "not in my backyard" perhaps, but I don't like this project nor any cyanidation project that threatens the public health or public resources, and experience tells me that accidents will happen. May the price of gold go down very soon, so that projects like these with narrow profit margins go away of their own weight!

The requirement of a $25,000 bond is specifically tied to ensuring neutralization of process wastes and waste water if the facilities are abandoned. DEQ's authorities do not extend to requirements of personal and property liability or catastrophic environmental liability insurance

Comment/Response 84.

Commenter: Eric Wilson, Lands Resource Manager, Idaho Department of Lands

The Idaho Department of Lands (IDL) has reviewed the draft cyanidation permit and the application dated 11/12/04. Although many similarities exist between the application submitted to DEQ and the plan submitted to IDL, several differences and inconsistencies are also present. Following is a list of outstanding issues that should be considered by DEQ in the final cyanidation permit.

The location of the existing wells and the wells that have been, or will be, sampled is still not clear. Page 8 of the IDL plan states that GW-C was sampled, but page 11 of the DEQ application states that GW-B was sampled. GW-C is referenced in the appendices of both plans.

Page 5 of the IDL plan and page 8 of the DEQ application state that wells BW-E and F will be sampled, but it is not clear if this is in addition to the sampling at GW-C(?).

DEQ's Appendix 4 contains two logs from unknown sources, WP-1 and WP-2. Are these logs from two of the existing wells?

DEQ agrees that the application neither reveals all of the ground water wells accurately nor adequately describes ground water conditions and geochemistry within ten miles of the site. However, DEQ believes that the requirement of source controls, in the form of the leak detection/leak collection system, its monitoring, and operating and maintenance plan sufficiently addresses the risks to surface and ground water quality.

The draft permit need not be modified to respond to this comment.

Comment/Response 85.

Commenter: Eric Wilson, Lands Resource Manager, Idaho Department of Lands

The applicant implies that water will be obtained on site. As far as IDL can determine, a water right for a well does not exist on this property.

Monitoring of surface water could be restricted to the Blacks Creek drainage if drainage from the site was prevented from flowing down the access road. The access road drains to the Wood Creek watershed. The access road, as it existed a week ago, needs some work before this is possible.

Normally a good characterization of the existing quantity and quality of water is done prior to mine construction. If the applicants wish to construct and operate prior to adequate characterization of the "background" conditions, then they should be held to the water quality standards without regard to undocumented "background" constituent levels.

DEQ agrees that the application neither reveals all of the ground water wells accurately nor adequately describes ground water conditions and geochemistry within ten miles of the site. However, DEQ believes that the requirement of source controls, in the form of the leak detection/leak collection system, its monitoring, and operations and maintenance plan sufficiently addresses the risks to surface and ground water quality.

The draft permit need not be modified to respond to this comment.

Comment/Response 86.

Commenter: Eric Wilson, Lands Resource Manager, Idaho Department of Lands

The DEQ application and the IDL plan state that the tailings will be dosed with sodium hypochlorite to neutralize the cyanide, and then the tailings will be discharged to the tailings impoundment. Some method of checking the neutralization in a timely manner is needed to ensure that the cyanide levels in the tailings are below the 0.2 mg/l WAD level. The safest scenario would be testing the tailings prior to discharge, but not enough information was given about the processing circuit to determine the feasibility of this testing. How will the operator make sure the 0.2 mg/l threshold is not exceeded in the impoundment?

Agreed.

Prior to issuance of any Final Permit, the plans and specifications for testing process waste water and tailings and verifying that they meet the chemical criteria for the discharge prior to release to the tailings impoundment must be submitted and approved by DEQ.

Comment/Response 87.

Commenter: Eric Wilson, Lands Resource Manager, Idaho Department of Lands

Page 6 of the DEQ application states that the site access will be gated, and the facility area will be fenced off. The road through the facility area, however, is a designated Off Highway Vehicle (OHV) trail in the Danskin OHV Area. It is shown on a map

published by the U.S. Forest Service as trail #189A. How will public traffic be routed around the active facility while keeping the site secure?

There will be no changes or restrictions of the public access routes through the patented mining claims, except in the immediate area of the ore processing buildings, tailings impoundment, and open pit mine, where access will be restricted by fencing.

Comment/Response 88.

Commenter: Eric Wilson, Lands Resource Manager, Idaho Department of Lands

How will OHV traffic be routed after permanent closure to make sure that reclamation success is not compromised by motorized access?

There will be no changes or restrictions of the public access routes through the patented mining claims, except in the immediate area of the ore processing buildings, tailings impoundment, and open pit mine, where access will be restricted by fencing.

Comment/Response 89.

Commenter: Eric Wilson, Lands Resource Manager, Idaho Department of Lands

IDL supports many of the terms contained in the draft permit. Two items in particular are worth noting. The first is the leak detection and collection system, which we believe is a great idea for this site. Surface water does not exist most of the year at the site, and ground water flow paths have not been characterized. As a result, the only way to detect a leak before it becomes a major problem is to install and maintain a leak detection and collection system. The second item is in Section XII, Permanent Closure. Subsection B contains a good summary of details needed to make sure reclamation of this site is a success. The welding of additional liner on top of the impoundment, as mentioned in bullet number 3, will be necessary for permanent closure based on the information in the application.

DEQ and the Idaho Department of Lands (IDL) have agreed that the final configuration of the tailings facility will be contingent upon analyses of the leaching characteristics of all of the tailings. Until the analyses are complete, DEQ and IDL are requiring that the liner materials will be ripped and removed where they are exposed along the embankments, and the tailings will be capped and covered with an evapo-transpiration cap, consisting of at least two feet of top soil, with a minimum thickness of 8 inches of top soil placed on the final surface. Per comment by the Idaho Department of Fish and Game, the area will be seeded with a mixture of mountain sagebrush, at 0.1 lbs. per acre and 5 lbs. per acre of each of the following grasses: bluebunch wheatgrass, Idaho fescue, squirreltail, and Sandberg bluegrass. In addition, the following forbs should be included, at 0.67 lbs. per acre each: small burnet, Dutch white clover, and alfalfa (2 lbs. per acre total forbs in the seed mix).

Comment/Response 90.

Commenter: Tom Menten, Ph.D.

The liabilities of cyanide leach mines in the Boise drainage are very obvious. If this is new technology, it would be more appropriate to demonstrate it's effective and successful use in a less sensitive area with fewer consequences.

It seems that an Owyhee site might provide the possibility of safer application.

This technology has been utilized at many different mines around the world. DEQ does not agree that there are any more or less sensitive areas, whose surface and ground water receive any more or any less protection from contamination that might originate from facilities of this kind.

Comment/Response 91.

Commenter: Tom Menten, Ph.D.

If such a mine is to be considered, then these liabilities should be detailed and quantified.

Based on potential risk analyses, DEQ continues to gather additional information (and comments) to evaluate the proposed operation.

Comment/Response 92.

Commenter: Tom Menten, Ph.D.

This work should form the basis for subsequent practices and audits of those practices. In particular the following questions should be answered rigorously; I strongly encourage the cooperation of qualified University of Idaho and BSU faculty in assessing the application:

The Rules do not provide for this comment.

Comment/Response 93.

Commenter: Tom Menten, Ph.D.

What is the total previous experience with the proposed new method?

The Rules do not provide for this comment.

Comment/Response 94.

Commenter: Tom Menten, Ph.D.

What are the specific results of this experience in terms of accidents, incidents, near misses, and observed and potential consequences?

The Rules do not provide for this comment.

Comment/Response 95.

Commenter: Tom Menten, Ph.D.

What would have the consequences been at the Blacks Creek site?

The Rules do not response to this type of rhetorical question.

Comment/Response 96.

Commenter: Tom Menten, Ph.D.

What provision is made for training and audit of methods and practices at the site?

The final permit will stipulate that an employee training program is necessary and that only appropriately trained personnel will be allowed to perform the tasks outlined in the Monitoring Plan, and Operating and Maintenance Plan.

Comment/Response 97.

Commenter: Tom Menten, Ph.D.

What are the ramifications of the tailings ponds, to what extent will they be cleaned up and remediated in an ongoing basis?

The required monitoring plan, and the operating and maintenance plan provides for this.

Comment/Response 98.

Commenter: Tom Menten, Ph.D.

What will be the estimated cost of this clean up and remediation?

The Rules do not require this evaluation.

Comment/Response 99.

Commenter: Tom Menten, Ph.D.

The existing bond amount ($25,000) is, of course, insignificantly small. It should be incumbent on the proposed permittee to provide the information necessary to establish an appropriate bond that will ensure normal clean up and remediation as well as cover the cost of any emergency response that is caused by accidents at the mine.

The requirement of a $25,000 bond is specifically tied to ensuring neutralization of process wastes and waste water if the facilities are abandoned. DEQ's authorities do not extend to requirements of personal and property liability or catastrophic environmental liability insurance.

By Rule, DEQ cannot change its requirement of a $25,000 bond.

Comment/Response 100.

Commenter: Tom Menten, Ph.D.

Certain personal assurances are being offered by the permit applicant. You should remember that a successful outcome depends on much more than such personal assurances. There have been many recent examples of environmental disasters following such personal assurances. This can be for a variety of reasons that may or may not have any relationship to the integrity of the individual making the assurances. A permittee with high integrity is vital to a positive outcome, and such an individual will welcome the audits and other checks and balances that are implemented to assure that he or any successor performs in an appropriate, open, collaborative manner for the public interest.

Noted.

Comment/Response 101.

Commenter: Robin Sorenson, Boise

I have read the application by Desert Minerals Mining, LLC for a permit for a cyanidation processing plant near Blacks Creek, and I have also read your permit draft. I was frankly dismayed that they would consider such an operation in the backyard of the largest metropolitan area in Idaho, and after reading, I was even more so.

As you are aware, the proposal is in basically three sections: the overview of the project on Blacks Creek, the detailed technical specifications, and various appendices. The technical specifications are such that could apply to any site and contain specific directives on how to build and operate a cyanidation processing plant according to the strict letter of the law. All well and good. The overview however, applies directly to the site off of Blacks Creek Road and contains major inaccuracies and considerable vagueness.

DMM is confused about their water supply. On page 6 they say: "water supply will be by ground water wells (local); DMM will purchase water supply from current water right user." According to the Department of Water Resources, there is no current water rights user and no water rights available for that piece of property without a transfer. There has been no application for a transfer. Where is the water coming from?

The Rules do not provide for analyses of water rights issues. However, DEQ has required that an accurate water balance is calculated and submitted for DEQ's consideration. Numerous comments have been made about this issue, and, where it is necessary to the protection of surface and ground water, DEQ expects an appropriate response from DMM prior to the Director's decision.

Comment/Response 102.

Commenter: Robin Sorenson, Boise

On page 9, they say: "according to the Uniform Building Code, the project is located in Seismic Zone 2b… Within a 200 kilometer radius of the site, Modified Mercalli Intensity V to VIII have occurred between 1852 and 1980." Correct, but this means that the Uniform Building Code considers Boise a high risk seismic area (Idaho Geological Survey). And they do not mention the larger MM intensity IX event that occurred

about 120 miles away in Challis in 1983. An additional item of concern not mentioned in their application is a fault that runs roughly NW to SE along Blacks Creek Road. Depending on how it is measured their site is a few miles upslope from this fault.

DEQ's engineering staff has evaluated the engineering designs and specification for the construction of the cyanidation facilities. The existing engineering criteria are based on acceptable engineering concepts, including those to provide for stability during seismic events. However, where the tailings impoundment is being proposed as a permanent disposal facility, the likelihood of a Modified Mercalli VII event occurring in proximity to the project site significantly increases towards being high, not low.

DEQ is requiring modifications of plans and specifications for a "downsized" tailings impoundment structure, which will accommodate less than 22,000 tons of tailings and meet the engineering criteria. DMM's narrative for the engineering designs and specifications must specifically confirm that the designs for the tailings impoundment will provide continued stability if a Modified Mercalli VII event occurs in the project area.

Comment/Response 103.

Commenter: Robin Sorenson, Boise

DMM seems oddly uninformed about their neighbors. On page 10 they say: "No known wells for drinking water exist within 5 miles of the site." It is difficult to see how anyone could have missed the houses along Blacks Creek Road or Indian Creek Road or the Mayfield Road. In fact, there are at least ten drinking water wells that are within their 5 mile limit and more just outside. In addition there are assorted livestock springs and campgrounds within that limit and Lucky Peak Reservoir itself.

By extending the public comment period and holding a public meeting, DEQ believes that this communication gap has, at least, been partially closed. DEQ agrees, however, that the process should continue, and, from DEQ's perspective, it will continue as far as DEQ's regulatory authorities can take it.

The Final Permit will require that DMM compile a call down list of all local residents to be contacted in the event an emergency situation develops relative to transporation or operating activities at the mine. In such an event, the local residents and ranchers be contacted and appraised of any state of emergency, immediately following contacts with emergency response agencies and first responders.

Comment/Response 104.

Commenter: Robin Sorenson, Boise

The next item concerns the testing facilities. It is my understanding that the water quality samples from the monitoring wells and from surface sources will be sent to an independent testing laboratory, while the process effluent will be tested on site for cyanide. I understand that the equipment and methods are prescribed by the EPA, but nothing has been said about the qualifications of the analyst. I would like to be assured

that these analyses are being done in a professional manner and the results would be repeatable by an independent laboratory.

The draft permit presents some errors relative to this issue. First, a certified independent laboratory in Boise will be conducting almost all of the analyses on process waste water and tailings samples, which must be treated and neutralized before discharge to the tailings impoundment. Second, the actual procedures and sampling of these wastes, along with some rudimentary tests, will be conducted on site by qualified personnel hired by DMM. DMM identified Robert J. Hayek as the On-Site Operations Manager for the Mill. DMM has submitted Mr. Hayek's resume for DEQ's evaluation. It appears that Mr. Hayek has extensive experience in overseeing staff, collecting, and analyzing water samples for geochemical and metallurgical analyses.

The Final Permit will stipulate that trained personnel, under Mr. Hayek's supervision, will collect samples and submit them according to standardized protocols for this activity.

Comment/Response 105.

Commenter: Robin Sorenson, Boise

On page 20, under section 5a (spill prevention and transportation plan), DMM refers to the reagents used on the project, to the MSDS for the reagents, and to the spill response and cleanup strategy specified. "All major constituents will have a spill response and cleanup strategy clearly specified." Mercury is listed under these major constituents, but it is not listed in the reagent list, nor is there a MSDS for it. I cannot find it anywhere in the flow chart of the process, either, so are they using it as a reagent or are they concentrating it from the ore samples?

DEQ agrees. By Rule, the relative amounts of chemicals transported and used at the site do not need to be listed in the application or permit. However, the draft permit stipulates that the Emergency Spill Response Plan, Storage Facilities, and MSDS list are kept current and address **all chemicals** transported used and stored at the site. Transportation, storage and use of chemicals that have not been provided for in the Emergency Spill Response Plan, appropriately stored, or listed in the MSDS sheets will be considered a violation off the permit. MSDS sheets that are available for any chemical products used at the site must be contained in the MSDS list. If there are substances, for which MSDS sheets are available, then DMM must compile these and include them with the other MSDS Sheets.

DMM should indicate how much mercury they plan on using to determine if mercury will then be considered a contaminant of concern that warrants monitoring.

DEQ will not be making any amendments to the MSDS portion of the draft permit per this comment. However, mercury will be included as a monitoring criterion for the waste water and tailings treatment.

Comment/Response 106.

Commenter: Robin Sorenson, Boise

As you know, Blacks Creek Road is a jumping –off point for recreationists using the Danskin area. Among these are motorcyclists, snowmobilers, bicyclists, hunters, horseback riders, wood-cutters, river rafters and others. As Boise grows and other areas are closed off, this area is going to see a lot more use. Mixing the recreational vehicles with heavy truck traffic containing toxic chemicals seems a recipe for disaster. Indian Creek Road is even less suited to heavy truck traffic due to tight, blind curves and steep inclines. The timing of the permit approval process (Christmas holidays) means that I have not been able to gather hard data points for the traffic on Blacks Creek Road to demonstrate this. The only data point I have is a white cross down in my lower pasture, and I definitely do not want another one.

DEQ is requiring a transportation plan that provides for surface and ground water protection. In that plan provisions must be made to accommodate the existing uses of the public along the access route and inclement weather or road conditions. As discussed by the Mountain Home Highway District (Wayne Tindall, January 11, 2005), **"Blacks Creek Road is a seasonal road and is posted NO WINTER MAINTENANCE. This road could be, and has in the past, been closed for up to four months, depending on the severity of weather."** This poses two water quality protection issues relative to this permit. The first issue is that if the roads aren't maintained, deleterious materials cannot be safely transported to the site, and any spills related to that transportation will enter surface or ground water. The second is that successful transportation of fuels and other maintenance fluids to the site is critical to maintaining and operating systems (pumps etc.) for water management, process wastewater treatment, and, subsequently, water quality protection at the mine and mill site. As such, DMM must provide contingencies for situations as a matter of providing water quality protection..

Unless DMM provides an appropriate alternative for transportation during inclement weather, or when roads are snow covered and/or icy, this requirement will remain in the permit.

Commenter: Robin Sorenson, Boise

A cyanidation processing plant carries with it a large potential for disaster; that is why there are regulations governing its use. This potential exists even for a cleanly-run facility. When the operators are misinformed, confused and vague about their proposed operation I think that is strong indicator that the operation should not be approved.

DMM is planning on using sodium hypochlorite as their neutralization medium, and that has been demonstrated to produce chloramines.

Subsequent to your comment, DEQ's staff spent time evaluating available information, not just on the likelihood of the development of chloramines, but also on their potential effects should they form. Although there is a remote chance of forming chloramines in the de-nitrification process of cyanide, chloramine is a widely used disinfectant in drinking water treatment systems throughout the United States and Canada. With the exception of dialyses patients and fish owners, chloramines do not pose a likely environmental or human health

threat. Currently, DEQ has not found any criteria for chloramines in surface or ground water systems.

No changes to the draft permit will be made in response to this comment.

Comment/Response 107.

Commenter: Robin Sorenson, Boise

In addition, sodium hypochlorite does not remove any iron-cyanide compounds that form. They will end up either concentrating in the settlement pond or concentrating in the working solution. Are these possibilities being covered by the compliance testing?

Strong acid dissociable (SAD) cyanides frequently form in the presence of high concentrations of metals and sulfate. Once formed, they are rarely re-dissolved in a relatively neutral or basic pH environment, such as that found in the surface and ground waters around Three Points Mountain. Therefore, even if SAD cyanides form, it is very unlikely that they would pose short or long term adverse reactions in local receptors.

No changes to the draft permit will be made in response to this comment.

Comment/Response 108.

Commenter: Robin Sorensen Appended Comments January 29, 2005.

There are several more questions I have in regard to the Desert Minerals Mining LLC proposed mine and cyanidation facility.

The tailings impoundment area is, I understand, 420 ft by 250ft. If you fill this area one inch deep with water it would require over 60,000 gallons of water. I believe their system holds about 800 gallons of water. Therefore, it seems that the slurry will, once in the impoundment, trickle down to the lower end, leaving the solids behind. The slurry would only cover a limited area and, as this occurs repeatedly, the solid would build up over time and start blocking the liquid. Has anyone anticipated this, and is there any provision for dealing with it if it occurs? Will people go in with rakes and shovels? A skidsteer? Can the liner deal with this?

Although designs of these systems usually provide for even dispersal of tailings, operating and maintenance of a system may require special considerations to prevent damage from occurring on the liners. DEQ will be reevaluating the proposed final designs for protectiveness of liners.

In response to this and similar comments, DMM has submitted, for DEQ review and approval, engineering drawings, designs, and specifications for the mill building that depict these secondary containment features (stemmed walls). The designs and specifications were prepared "For Construction." Engineering drawings, designs, and specifications for the mill building have been signed and stamped by a Professional Engineer registered in the state of Idaho. The plans and specifications provide for appropriate sealing of seams and cracks. The Revised Operating Plans also provide for routine maintenance and cleanup of all spills of chemicals and other deleterious materials from the secondary containment, either returning them to the processing or treatment circuits of the mill, or sending them to appropriate disposal off-site.

Comment/Response 109.

Commenter: Robin Sorensen Appended Comments January 29, 2005.

Carrying this scenario farther, it seems likely, as they are going to recycle most of their water, that the tailings will dry up in the summertime. Have you considered wind erosion? We are talking about fine particles; the winds in this area can be fierce. Would this not be considered an unauthorized discharge from the impoundment?

The Cyanidation Rules do not provide for evaluation of wind erosion and dispersal of tailings nor for evaluation of the potential risks to human and other biological receptors. Idaho's Rules for the Control of Fugitive Dust do contain provisions that DMM must meet to be compliant with those rules, even if those rules do not require DMM to obtain a new source permit. To date, DMM has not contacted DEQ's Air Quality staff to determine what their obligations are under those rules. DEQ's air quality staff is particularly concerned regarding the nature of the tailings and their concentrations of toxics.

Other considerations of these risks are made in the rules and regulations administered by the Occupational Health and Safety Administration, within which an operator must provide for health and safety considerations of employees in dusty environments. Presumably, the tailings in the impoundment will be kept wet enough to eliminate this erosion until operations have ceased and reclamation and closure of the tailings impoundment eliminate this threat.

The Final Permit will stipulate the necessity of DMM to comply with both the Rules for the Prevention of Air Pollution, and the Rules for the Prevention of Fugitive Dust.

Comment/Response 110.

Commenter: Robin Sorensen Appended Comments January 29, 2005.

The Thompson mill system uses limited water and relies heavily on recycling. I don't think any separation process is perfect and inevitably some end products and byproducts are going to be left behind. Over time, these might build up and interfere with the efficiency of the mill, thereby requiring personnel to flush the system and start over. If this occurs, or if for any other reason they need to flush the system, what is going to be done with the solids and liquids flushed?

Although it is not anticipated at this time, wastes that result from the decommissioning, decontamination, and dismantling of the ore processing equipment and facilities may require collection and disposal of wastes that will be more appropriately disposed in a facility such as American Ecology's landfill.

The Final Permit will stipulate that, at closure, all milling equipment and plumbing of the milling facilities will be dismantled and decontaminated, and that the resulting waste products will be characterized, treated, and disposed according to their characteristics.

Comment/Response 111.

Commenter: Robin Sorensen Appended Comments January 29, 2005.

The draft permit allows for the processing of 120,000 tons of ore. The tailings impoundment holds 25,000 tons with the option of adding another 36,500 ton section. I realize that DMM is only planning a run of 25,000 tons at this time, but if the permit allows 120,000 tons, should not a professional engineer look at the site to determine if there is even room for impoundment areas 3 and 4 before issuing the permit?

The Draft Permit did stipulate that DMM could process up to 120,000 tons. However, you are correct in your assessment; the tailings impoundment is incapable of storing this quantity of tailings.

DEQ will stipulate that the final volume of tailings in a Final Permit is based on the final design criteria of the tailings impoundment and that is 22,000 tons. This is an amount proposed by DMM in the modified engineering designs and specifications submitted to DEQ.

Comment/Response 112.

Commenter: Robin Sorensen Appended Comments January 29, 2005.

On page 9 of the draft permit, number seven seems unclear. Do I understand correctly that DMM is going to be doing all of its own compliance testing?

DMM will be responsible for collecting and analyzing all treated process waste water and tailings prior to release to the tailings impoundment, collection, sampling and analyses of effluent in the leak detection system, and sampling and analyses of all ambient water quality from surface monitoring of the operations. DEQ does not have any resources available to provide compliance monitoring the facilities on a day to day basis.

Comment/Response 113.

Commenter: Robin Sorensen Appended Comments January 29, 2005.

I am having second thoughts about rescinding the groundwater monitoring requirement. The numerous springs and seeps in this area and the groundwater close to the surface seem to me to argue an immediate connection between surface and groundwater and a far greater opportunity for contaminating either one. I think the monitoring is particularly important, as a baseline has not really been established yet. Surface water analyses were done for a portion of one year, but no multi-year studies were done, and there was only one sample of groundwater analyzed. This is not nearly enough to establish a trend or to do any meaningful statistical analyses.

DEQ agrees that the application neither reveals all of the ground water wells accurately nor adequately describes ground water conditions and geochemistry within ten miles of the site. However, DEQ believes that the requirement of source controls, in the form of the leak detection/leak collection system, its monitoring, and the operating and maintenance plan sufficiently address the risks to surface and ground water quality.

The Draft Permit need not be modified to respond to this comment.

Commenter: Robin Sorensen Appended Comments January 29, 2005.

And finally, has anyone thought to test various ore samples for radioactivity?

Evaluation of the ore body did not consider radioactivity as posing a likely threat.

Comment/Response 114.

Commenter: Bonnie Sharp – Director, Growth and Development Department, Elmore County

As a local government agency we are taking advantage of the opportunity you have extended to respond with our comments concerning DMM Draft Permit #CN-000030.

We will require that any and all structures constructed on the site, or brought onto the site, shall first obtain an Elmore County Zoning Permit and Building Permit. This includes, but is not limited to any footings/foundations supporting any structures or machinery and any roofed areas covering the mill or other facilities. Any structures brought onto the site for an office or living quarters must be Idaho Certified structures. Any type of fencing higher than 8 feet will also require a valid Building Permit.

Noted.

Comment/Response 115.

Commenter: Bonnie Sharp – Director, Growth and Development Department, Elmore County

We do have concerns about possible transportation accidents while moving any dangerous chemicals or products to and from the site on roadways that are of rural construction and are also weather sensitive. We would encourage that complete planning and design for spill contingency and emergencies proposed in the application be adhered to.

DEQ is requiring a transportation plan that provides for surface and ground water protection. In that plan provisions must be made to accommodate the existing uses of the public along the access route and inclement weather or road conditions. As discussed by the Mountain Home Highway District (Wayne Tindall, January 11, 2005), **"Blacks Creek Road is a seasonal road and is posted NO WINTER MAINTENANCE. This road could be, and has in the past, been closed for up to four months, depending on the severity of weather."** This poses two water quality protection issues relative to this permit. The first issue is that if the roads aren't maintained, deleterious materials cannot be safely transported to the site, and any spills related to that transportation will enter surface or ground water. The second is that successful transportation of fuels and other maintenance fluids to the site is critical to maintaining and operating systems (pumps etc.) for water management, process wastewater treatment, and, subsequently, water quality protection at the mine and mill site. As such, DMM must provide contingencies for situations as a matter of providing water quality protection.

Unless DMM provides an appropriate alternative for transportation during inclement weather or when roads are snow covered and/or icy this requirement will remain in the permit.

Comment/Response 116.

Commenter: Bonnie Sharp – Director, Growth and Development Department, Elmore County

We have concern about possible costs to Elmore County directly and indirectly should problems or environmental degradation occur which are not covered sufficiently by a financial bond guarantee. We urge that you do all that is within your authority to require the maximum bond amount that Idaho law allows.

The requirement of a $25,000 bond is specifically tied to ensuring neutralization of process wastes and waste water if the facilities are abandoned. DEQ's authorities do not extend to requirements of personal and property liability or catastrophic environmental liability insurance.

By Rule, DEQ cannot change its requirement of a $25,000 bond.

Comment/Response 117.

Commenter: Bonnie Sharp – Director, Growth and Development Department, Elmore County

Elmore County is extremely concerned about our environment as well as water quality and quantity, both surface and underground. We insist that you require the most stringent monitoring of water quality at this site to assure that all precautions are taken to insure safe water for all Elmore County citizens.

DEQ appreciates the comments by Elmore County and its Board of Commissioners. With the help of considerable amounts of public comment, and the cooperation of the proponents, DEQ believes that it will be able to generate a permit that is protective of local environmental and human health concerns. DEQ is not, however, in a position of authority from which it might arbitrate water rights issues.

Comment/Response 118.

Commenter: Bonnie Sharp – Director, Growth and Development Department, Elmore County

Finally, the Board of County Commissioners would request that prior to issuing the permit, the DEQ assign personnel to provide information and answers to questions that our citizens might have about this project at a public information forum to be held in Mountain Home.

Subsequent to responding to the tremendous public comments, the Director's decision, and, if appropriate, drafting and issuance of a permit, DEQ will be very pleased to appear before the Board of Elmore County Commissioners and respond to any additional questions or comments they may have.

Comment/Response 119.

Commenter: Duane Sammons,

Today's Idaho Statesman identified sending an email to you directed to Bruce Schuld regarding the proposed gold mine south of Boise.

I am Duane Sammons, I retired from the Idaho State Police December 2003. I worked for 15 years as the Deputy Commander of the Commercial Vehicle Safety and Hazardous Materials programs.

I strongly object to the proposal to open the gold mine and use the leach method to extract the ore. This is an environmental problem from the get go. Typically these gold mines become operational for a period of years, then the ore runs out or the price drops to a level that makes operation non profitable and the company leaves the site. They leave without doing any remediation or without doing adequate remediation. The mess is then left to the state to clean up.

Many times the collection ponds fail during spring run off or heavy rains and pollute the run off from the area.

Idaho has seen lots of these types of operations over the years and I am not familiar with any that have been completed without environmental issues.

This company states "the waste generated will be turned into a profitable by product eventually." I suggest that science does not support that statement. If the by product of the leaching process can be used profitably why would this company or others not move into abandoned mining sites and reclaim all the waste for a profit.

The other area of concern is the transportation of supplies to and from the mining operation and the traffic on the roads. Supplies such as fuels and chemicals would travel over poorly maintained mountain dirt roads. Sharp curves, soft shoulders on the roads and large trucks trying to make tight turns will inevitably end up with a truck turned over leaking hazardous materials into and on the ground.

The potential and real environmental risks that will result from this proposed operation are just not worth taking. The proposal comes from a California company and when they leave or there is a problem, they will be in California and Idaho will have to deal with the problem.

I strongly urge the DEQ to disapprove this proposal from Desert Mineral Mining.

Although DEQ is requiring transportation plan that provides for surface and ground water protection, all vehicular use is inherently risky. Nevertheless, the Transportation Plan must make provisions to accommodate the existing uses of the public along the access route and inclement weather or road conditions. As discussed by the Mountain Home Highway District (Wayne Tindall, January 11, 2005), **"Blacks Creek Road is a seasonal road and is posted NO WINTER MAINTENANCE. This road could be, and has in the past, been closed for up to four months, depending on the severity of weather."** This poses two water quality protection issues relative to this permit. The first issue is that if the roads aren't maintained, deleterious materials cannot be safely transported to the site, and any spills related to that transportation will enter surface or ground water. The second is that successful transportation of fuels and other maintenance fluids to the site is critical to maintaining and operating systems (pumps etc.) for water management, process wastewater treatment, and,

subsequently, water quality protection at the mine and mill site. As such, DMM must provide contingencies for situations as a matter of providing water quality protection.

The Final Permit will stipulate that a schedule for delivery will be developed and submitted as an inclusion in the final "Spill Prevention and Transportation Plan." This plan must be completed and submitted for approval by DEQ, no later than 8 weeks from the beginning of operations.

The Final Permit will also stipulate that signs will be posted locally, as advisories for the public, of when it might expect to see heavy truck traffic on public roads in proximity to the mine. It will also be changed to stipulate that a schedule for delivery will be developed and submitted as an inclusion in the final "Spill Prevention and Transportation Plan." This plan must be completed and submitted, for approval by DEQ, no later than 8 weeks from the beginning of operations.

The Final Permit will also stipulate that no transportation be allowed during inclement weather or when roads are snow covered and/or icy.

Comment/Response 120.

Commenter: Jenny Emerson

In regards to the mining proposal, my primary concern is that of environmental harmony and integrity. The Danskins are an important area for wintering elk and deer, and I want to ensure that wildlife would not be adversely affected. How can we ensure that this area is left clean, & ecologically intact**? I am concerned that $25,000 bond would not be enough to cover the cost of environmental restoration. And what happens if the company refuses to clean up after itself? I am concerned that 55 gallons of diesel would be allowed to spill and up to 10 mg/L allowed in the water before the company would be required to issue a report. I would suggest that the company report on spills in much smaller amounts.** This area is a special place---a place of sanctuary, spiritual retreats and recreation and I want to see this area treated with great respect and responsibility. **How do we ensure toxic residues will not pose a threat to our children and pets---not to mention the blue birds and buntings?**

The requirement of a $25,000 bond is specifically tied to ensuring neutralization of process wastes and waste water if the facilities are abandoned. DEQ's authorities do not extend to requirements of personal and property liability or catastrophic environmental liability insurance.

By Rule, DEQ can not change its requirement of a $25,000 bond.

Comment/Response 121.

Commenter: C. Wayne Tindall, Director of Highways, Mt Home Highway District

The Mt Home Highway District would like to take this opportunity to offer comment with regards to the Proposed Cyanide Leaching Operation. This operation is to be located near and have access to Blacks Creek Road which is under the jurisdiction of the Mt Home Highway Dist.

The increase in traffic volume generated by this Operation should have no negative impact on our road system. As we understand it, the ore itself will not be transported over any Public Roads. However, in the future, should this situation change please contact our office.

Noted.

No changes to the Draft Permit will be made in response to this comment.

Comment/Response 122.

Commenter: C. Wayne Tindall, Director of Highways, Mt Home Highway District

Additionally it needs to be understood by all concerned that Blacks Creek Road is a seasonal road is posted NO WINTER MAINTENANCE. This road could be, and has in the past, been closed for up to four months depending on the severity of the winter.

We would also like to request that, in the future, we be notified of any project that has the potential to impact our road system.

This comment is particularly relevant because DMM intends to deliver various chemicals and fuels to the site for its operation and maintenance. Safe transportation and successful delivery of these materials is critical to protection of surface and ground water quality along the transportation corridor and at the site. As such, DMM must provide contingencies for ensuring water quality protection.

Unless DMM provides an appropriate alternative for transportation during inclement weather or when roads are snow covered and/or icy, this requirement will remain in the permit.

Comment/Response 123.

Commenter: Rich Kaylor, Boise

I was surprised that this project is considered a "small mineral ore processing facility" when it can process up to 100 tons per day, or 36,500 tons per year for five years or 120,000 tons. How big a hole is 120,000 tons.

The Rules specify this classification of the operation.

Comment/Response 124.

Commenter: Rich Kaylor, Boise

I can't believe that in this day an age Idaho would allow Ore Processing by Cyanidation. I guess Idaho does not have enough Super Fund projects and would like some more.

The project is terrible enough but to have it located so close to Boise and lucky Peak Res. and along Black Creek Road is frightening. It will have a major impact on the community.

I laughed when I read that Desert Mineral Mining, LLC (DMM) is required to post financial assurance (XIII. FINANCIAL ASSURANCE) of $25,000 to insure that the

facility is properly permanently closed. $25,000 won't even cover the cost of documenting what needs to be done, much less actually doing anything.

I can't believe you are going to allow them to wrap up the contaminated material in a large Glad bag:

The requirement of a $25,000 bond is specifically tied to ensuring neutralization of process wastes and waste water if the facilities are abandoned. DEQ's authorities do not extend to requirements of personal and property liability or catastrophic environmental liability insurance.

By Rule, DEQ cannot change its requirement of a $25,000 bond.

Comment/Response 125.

Commenter: Rich Kaylor, Boise

"XII. PERMANENT CLOSURE A. DMM shall complete and submit a detailed Permanent Closure Plan within one year of the effective date of this permit. ...

B. The Permanent Closure Plan must, at a minimum, provide details for the following:

2 Cutting the HDPE liner on the berms, folding the liner over the top of the tailings in the impoundment and welding the ends to additional liner together, if necessary, on top of the tailings in the impoundment. "

DEQ and the Idaho Department of Lands (IDL) have agreed that the final configuration of the tailings facility will be contingent upon analyses of the leaching characteristics of all of the tailings. Until the analyses are complete, DEQ and IDL are requiring that the liner materials will be ripped and removed where they are exposed along the embankments, and the tailings will be capped and covered with an evapo-transpiration cap, consisting of at least two feet of top soil, with a minimum thickness of 8 inches of top soil placed on the final surface. Per comment by the Idaho Department of Fish and Game, the area will be seeded with a mixture of mountain sagebrush, at 0.1 lbs. per acre and 5 lbs. per acre of each of the following grasses: bluebunch wheatgrass, Idaho fescue, squirreltail, and Sandberg bluegrass. In addition, the following forbs should be included, at 0.67 lbs. per acre each: small burnet, Dutch white clover, and alfalfa (2 lbs. per acre total forbs in the seed mix).

Comment/Response 126.

Commenter: Rich Kaylor, Boise

Someone asked about water rights for this operation and Water Resources said that only the Truck stop and the rest stop have water rights in this area. What are they going to use for water? And where is the contaminated water going, other than into the Glad bag?

The Rules do not provide requirements for the evaluation of water rights or for the Department to act as an arbitrator of water rights disputes.

No changes will be made in the Draft Permit relative to this comment.

Comment/Response 127.

Commenter: Rich Kaylor, Boise

Has any mining operation in Idaho using cyanide ever been completed without contaminating the environment?

I would hope that someone with a head on their shoulders at DEQ would review this request for reasonableness and quickly quash it.

As an Idaho taxpayer I don't want to clean up the mess left by DMM after they take their millions and run back to California

PS Thanks for extending the public comment period. So often businesses get away with murder because the public does not have time to react to it, or even hear about their evil plans.

Yes.

Comment/Response 128.

Commenter: Chia R. Wood

Thank you for hosting the public meeting on DMM's proposed cyanidation facility.

As several people pointed out, the permit application is neither complete nor stable. You explained that the permitting procedure doesn't allow for the process to be restarted with a revised application. I think, therefore, that the only alternative is to deny the permit**. The proposal is lacking information of sufficient substance to make it impossible to review or approve. Substantive omissions include the water source and building locations**. **Since Mr. Terzo refused to say where he planned to get water, we simply don't have an approvable plan. It's one thing to make clear revisions to a basically sound plan; it is something altogether different to approve, even provisionally, a plan that deliberately refuses to address the difficult questions. Even if you get answers down the road, to the public, that would amount to a new plan.**

You are correct that the locations of facilities must be accurately located and depicted on final plans, but only prior to final approval of those plans or a permit are such details required.

The Rules do not provide requirements to evaluate water rights or for the Department to act as an arbitrator of water rights disputes.

Furthermore, by Rule and practice, DEQ does not place modified plans, resulting from response to public comments, to be placed in a feedback loop that could easily result in no decision endpoints for the agency or an applicant.

No changes will be made in the Draft Permit relative to these comments.

Comment/Response 129.

Commenter: Chia R. Wood

I would also like to point out that there is no uncertainty what will happen if the venture proves unprofitable: the company will default. This is Mr. Terzo admitted strategy "to protect the inventor and ..." others with an interest in DMM. From what do they need protection? From the need to pay the cost of their own failed experiment. Since the technology is experimental, failure is likely. And certainly if there is an accident, site contamination, something of the sort, the venture becomes unprofitable and we can rely on DMM to leave Idaho with the costly problem. Because they have made their intentions clear--their intention to protect themselves from fiscal responsibility--we have no basis to assume that any omissions in their proposal will be resolved in a responsible manner. Rather, we have every reason to assume the opposite. Therefore, an incomplete plan is a plan that must be denied.

DEQ's authorities do not extend into evaluation of the financial feasibility of a proposed project or company.

No changes will be made in the Draft Permit relative to these comments.

Comment/Response 130.

Commenter: Idaho Conservation League

The application, as provided to the public and as presented on DEQ's website, is still not complete. As a result, the application (and issuance of a draft permit) violates numerous provisions of Idaho law.

DEQ does not concur with this assessment.

Comment/Response 131.

Commenter: Idaho Conservation League

Key components of the cyanidation process are still not described with sufficient detail in the application or the permit to determine if the operation will be protective of water quality.

While DMM expressed a willingness to redesign the tailings impoundment with a double liner and leak detection and removal system, these specifics are not included in the permit application available to the public. The tailings impoundment as described in the permit application is not sufficiently protective.

DEQ does not concur with this assessment.

Furthermore, by Rule and practice, DEQ does not place modified plans, resulting from response to public comments, to be placed in a feedback loop that could easily result in no decision endpoints for the agency or an applicant.

No changes will be made in the Draft Permit relative to this comment.

Comment/Response 132.

Commenter: Idaho Conservation League

The public has not been able to review this permit along side the completed Reclamation Plan – thus there is no context to determine if allowing the cyanidation process at this facility will have long-term environmental impacts.

DEQ does not concur with this assessment. Public Notices and a press releases were issued to the Mountain Home News and Idaho Statesman on October 4, 2004, when DEQ first received an application for a permit by DMM; again on November 4, 2004, when DMM modified their application; on December 4, 2004, when DEQ determined to issue a draft permit for the public to review and comment; and again on January 4, 2005, when DEQ extended the public comment period. DEQ also posted the application, draft permit, Public Notices and press releases on the Internet (at http://www.deq.state.id.us/Applications/NewsApp/shownews.cfm?event_id=996) for easy access. ICL and the public had access to all of the application materials since October 4, 2004, and were notified repeatedly as additional materials were made available to the public.

No changes will be made in the Draft Permit relative to these comments.

Comment/Response 133.

Commenter: Idaho Conservation League

We have concerns about the ability of the applicant, its underwriters and officer to assure accountability in the event of cyanide spill or other failure at the facility.

By Rule, DEQ does not have the authorities or criteria to evaluate applicants from this perspective.

Comment/Response 134.

Commenter: Idaho Conservation League

Because the public cannot adequately gauge the adequacy of the proposed facility without an updated application, we ask that the Department of Environmental Quality deny Desert Mining Minerals a cyanidation permit. When Desert Minerals Mining provides this information to DEQ, DEQ needs to provide the public a period of time to review this new material and provide comment.

DEQ does not concur with this assessment. Public Notices and a press releases were issued to the Mountain Home News and Idaho Statesman on October 4, 2004, when DEQ first received an application for a permit by DMM; again on November 4, 2004, when DMM modified their application; on December 4, 2004, when DEQ determined to issue a draft permit for the public to review and comment; and again on January 4, 2005, when DEQ extended the public comment period. DEQ also posted the application, draft permit, Public Notices and press releases on the Internet (at http://www.deq.state.id.us/Applications/NewsApp/shownews.cfm?event_id=996) for easy access. ICL and the public had access to all of the application materials since October 4, 2004, and were notified repeatedly as additional materials were made available to the public.

No changes will be made in the Draft Permit relative to these comments.

Commenter: Idaho Conservation League

Past experiences with improperly managed and regulated mining operations make it necessary to have heightened vigilance about all mining proposals. The Idaho Conservation League wants to ensure that this operation will not lead to tragic short-term and long-term consequences on human health, water quality and wildlife. We want to make sure that the mining operators design operations so that protecting public health remains the highest priority.

Commenter: Idaho Conservation League

Comment/Response 135.

Public Involvement

Request to extend public comment period: We appreciate DEQ's willingness to extend the public comment period and hold a public meeting to learn more about this issue. We feel that having the ability to learn firsthand about this project has significantly improved the quality and content of our comments.

Key components of the cyanidation process are not described

While discussed at the public hearing, the application and the permit do not contain descriptions of the most current components.

***Tailing discharge to tailing impoundment*: Neither the application nor the permit reveal how the tailings discharged from the mill will be conveyed/transferred to the impoundment or describe the protocol to prevent human error. This is a serious omission. A failure at this key juncture could result in significant discharges to surface and groundwater. Valves and pipeline joints are a common source for spills and leaks, particularly when adequate protocols for reducing human error are not followed. This omission is particularly troubling given the fact that cyanide in the tailings will be only partially neutralized at this point.**

Based on conversations with DMM, both in the Public Meeting January 20, 2005 and afterwards, DMM has stated that their request for a permit is based on processing of approximately 22,000 tons. This is the current design capacity of their proposed tailings impoundment. DMM may subsequently modify, through the formal modification process, its permit for a "Small Mineral Processing Facility" to include processing of up to 120,000 tons.

The Final Permit will stipulate that unless formally modified, the permittee will be allowed to process and dispose of up to 22,000 tons.

Comment/Response 136.

Commenter: Idaho Conservation League

There is mention that multiple spigots (page 3 of application and page 11 of draft permit) will discharge the tailings to the impoundment. If this is the case, presumably the operator will be utilizing some sort of piping to transport the tailing to the "spigots." This piping needs to be designed such that there is no danger of failure at

joints and that surface activities do not rupture or otherwise harm the pipes. Piping needs to be adequately supported to insure structural integrity and at the proper slope to ensure drainage and avoid blockage. Additionally, there needs to be sufficient redundancy build into the system such that a failure of the primary piping does not result in the discharge of pollutants to the environment. Further, there needs to be a leak detection system incorporated in the pipe corridor. We are also concerned that pipes and joints may become frozen in cold weather and that spills will travel much farther over frozen soil.

The recent contamination of the Rathdrum Aquifer in North Idaho by significant quantities of diesel fuel at a state of the art refueling station provides a poignant illustration of the need to adequately engineer all components of a facility. In this instance, both the train platform and storage containers were adequately contained with redundant systems, but the buried PVC drain pipe that served as the source of the leak was not. The parallels between the north Idaho facility and this proposed gold mine are readily visible. Careful attention must be paid to the must mundane feature of the facility and DEQ must ensure that such features are appropriately designed and built.

DEQ cannot approve this draft permit absent acceptable designs describing all conveyance systems. Likewise, the public cannot adequately gauge the adequacy of the proposed facility absent this key information. When Desert Minerals Mining provides this information to DEQ, DEQ needs to provide the public a period of time to review this new material and provide comment.

In response to this and similar comments, DMM resubmitted engineering drawings, designs, and specifications for the plumbing connecting the ore processing facilities and the tailings impoundment. These include pipe sizing, pipe materials, secondary containment (lined ditches), spill prevention measures and/or potential freeze protection for pipe(s), and, as with other drawings plans and specifications, have been be stamped and submitted for DEQ's engineering review and approval. These plans and specifications have been reviewed and approved by DEQ and will be criteria for construction of the facilities.

Comment/Response 137.

Commenter: Idaho Conservation League

***Leak detection and collection at impoundment*:** **The draft permit states, "The tailings impoundment must be underlain by a leak detection/leak collection system" (page 10). While DMM committed to redesigning this component at the public meeting, neither the application nor the permit describes such a system and there are no engineer's designs to govern the construction and/or operation of this key system.**

Failure of the permit to require a means of providing for "adequate leak recovery" is a violation of IDAPA 58.01.13.200.02.

DEQ cannot approve this draft permit absent acceptable designs describing this system. Likewise, the public cannot adequately gauge the adequacy of the proposed facility absent this key information. When Desert Minerals Mining provides this information to

DEQ, DEQ needs to provide the public a period of time to review this new material and provide comment.

***Leachate collection and removal in impoundment*: The application and the permit fail to adequately describe a system to collect and remove leachate from within the impoundment. While DMM presented some modified designs at the public meeting, these designs are not yet available to the public for detailed review. Failure to incorporate an adequate system into the design into the impoundment may result in inadequate treatment or neutralization of the tailings material and jeopardize the ability of the operator to manage the water balance in the impoundment. Further, the failure to have an acceptable leachate collection and removal system will make it very difficult to minimize the discharge that would occur through a leak in the liner should one arise.**

Figure 6 in the application describes some components of a "sump" system. Although DMM assured the public that the refined version would have improved features, these designs do not appear in the application or permit. This system needs to provide for a distributed collection system (a grid like system of pipes) above the liner. The size of the impoundment (420 ft x 250ft) and the fact that the impoundment floor appears to be level in the application (i.e. not sloping to channel leachate) seems to argue that a collection system – not a point of collection –needs to be redesigned and resubmitted for public review.

DMM has submitted engineering drawings, designs and specifications, and appropriate narrative describing the storage capacity of the leak detection and collection system that have been signed and stamped by a Professional Engineer registered in the State of Idaho and submitted to DEQ for review and approval. Engineering drawings, designs, and specifications "For Construction Purposes" have been stamped and submitted for DEQ's engineering review and approval. The permit will stipulate that the leak detection and collection system will be monitored twice daily, once in the morning and once in the evening at approximately twelve hours (12) intervals. The permit will provide that whenever the volume of water in the collection system can be pumped, it will be pumped back to the milling facility for use and subsequent treatment prior to discharge to the tailings impoundment.

Comment/Response 138.

Commenter: Idaho Conservation League

DEQ cannot approve this draft permit absent the requirement that a leachate collection and removal system be incorporated into the design of the impoundment and acceptable designs describing a system are included. Likewise, the public cannot adequately gauge the adequacy of the proposed facility absent this key information. When Desert Minerals Mining provides this information to DEQ, DEQ needs to provide the public a period of time to review this new material and provide comment.

By Rule and practice, DEQ does not place modified plans, resulting from response to public comments, to be placed in a feedback loop that could easily result in no decision endpoints for the agency or an applicant.

Comment/Response 139.

Commenter: Idaho Conservation League

The precise location of the tailings impoundment: **The application fails to actually demonstrate where the facility and key components (such as the tailings impoundment) will be located within in the boundary if the site. On this point, the application states: "The exact optimized location is currently being optimized" (page 2). Although a map at the public meeting showed the latest location of the impoundment, the public has not had an opportunity to review this information in light of previous mining activity, slope stability, and geohydrology.**

The finalized location of the tailings impoundment is actually quite important in determining the impact that this proposed operation might have on water quality. The mine site is located on a watershed divide between Blacks Creek and Wood Creek. The Blacks Creek drainage flows through private property and into the Blacks Creek Reservoir. Wood Creek flows into the Arrowrock Reservoir which serves as a migratory pathway for bull trout between the South and Middle Forks of the Boise River. It is vitally important to know the exact, finalized location of the tailings impoundment and other infrastructure to find out which watershed(s) would be contaminated by a leak or spill.

Figure 7 in the application is a map that notes the location of multiple springs and seeps in the general area proposed for the tailings impoundment and processing facility. One of these springs, which appears to be in the general area being considered for the tailings impoundment in the written application, has a history of discharging 5 gallons of water per minute. Locating the impoundment on top of this or other springs would greatly undermine the stability of the impoundment structure.

DEQ cannot approve this draft permit without knowing the final location of the tailings impoundment on the site. Likewise, the public cannot adequately gauge the adequacy of the proposed facility absent this key information. When Desert Minerals Mining provides this information to DEQ, DEQ needs to provide the public a period of time to review this new material and provide comment.

DEQ agrees that the final location and designs for the tailings impoundment is important to ensuring protection of surface and ground water. The importance hinges on its location relative to local hydrology, foundation soils and bedrock, and a number of other factors. DMM has submitted revised impoundment final designs and a location for DEQ to evaluate the adequacy of the location and engineering designs.

By Rule and practice, DEQ does not place modified plans, resulting from response to public comments, to be placed in a feedback loop that could easily result in no decision endpoints for the agency or an applicant.

Comment/Response 140.

Commenter: Idaho Conservation League

Information regarding milling equipment to be used: **The application contains scant information specific to the milling equipment that is proposed for use at this site. While**

we appreciate the commitment given at the public meeting to seal all joints and cracks in the concrete pad and to seal the lower parts of the walls, we would still like additional information on the containment system integrated into the equipment itself. While there is a general (and sufficient) description of how a cyanidation mill generically works, there is no information about the reported safety and containment features intended to contain spills before any contaminants reach the floor.

The application reveals that that a "Thompson Mill" system will be used (page 2). Other parts of the application assert that the processing facility will be "totally contained within the Thompson Mill tankage" (page 8). The application fails to describe any components of the "Thompson Mill" that may serve to capture spilled chemicals or otherwise contain a discharge. There is no way for DEQ or the public to determine of the supposed "tankage" is sufficiently construct, located and sized to contain a discharge.

Figure 3 (Generalized Process Flowsheet) similarly fails to provide any details that allow DEQ or the public to understand how (or if) discharges will be contained. Indeed, if anything, the diagram "Basic Mill Circuit 100 TPD" in Figure 3 only serves to raise concerns since the diagram shows no spill containment equipment or "tankage" what so ever.

DEQ cannot approve this draft permit without knowing what discharge containment equipment or mechanism are integrated into the mill to be used. Likewise, the public cannot adequately gauge the adequacy of the proposed facility absent this key information. When Desert Minerals Mining provides this information to DEQ, DEQ needs to provide the public a period of time to review this new material and provide comment.

The comment that both the primary and secondary containment systems need to be evaluated is appropriate if there is the potential for catastrophic failure of the primary containment system. Given the level of security of the primary containment system, it is unlikely that any substantial spills will occur into the secondary containment system, but DMM has developed and submitted plans and specifications for the secondary containment system, which provides for sealing the system and allowing for drainage to a location where spills can be collected and removed. DEQ has required an ongoing Operating and Maintenance Plan to provide for routine cleanup of all spills of chemicals and other deleterious materials from the secondary containment, either returning them into the processing or treatment circuits of the mill or to appropriate disposal off-site. This should adequately provide for ICL's concerns.

Furthermore, by Rule and practice, DEQ does not place modified plans, resulting from response to public comments, in a continuous feedback loop of public comment that could easily result in no decision endpoints for the agency or an applicant.

In response to this and similar comments, DMM has submitted, for DEQ review and approval, engineering drawings, designs, and specifications for the mill building that depict these secondary containment features (stemmed walls). The designs and specifications were prepared "For Construction." Engineering drawings, designs, and specifications for the mill building have been signed and stamped by a Professional Engineer registered in the state of Idaho. The plans and specifications provide for appropriate sealing of seams and cracks. The Revised Operating Plans also provide for

routine maintenance and cleanup of all spills of chemicals and other deleterious materials from the secondary containment, either returning them to the processing or treatment circuits of the mill, or sending them to appropriate disposal off-site.

Comment/Response 141.

Commenter: Idaho Conservation League

Information regarding the building as a containment structure:

While we appreciate the commitment given at the public meeting to seal all joints and cracks in the concrete pad and to seal the lower parts of the walls, we would still like additional information on the building as a containment system. The application should include additional information on the thickness and porosity of the concrete slab to be used, the type of material used to fill cracks and joints, and the general layout of the facility. Entrances for people and vehicles will be difficult to seal adequately. We suggest designing the entrances so that they are elevated high enough above the floor so that spills will not escape. Vehicle bays can either be situated on a raised slab or on a sloped surface. The application should also include a schedule for facility inspections that will look for and seal any new cracks in the foundation.

The application should also include additional information about emergency exits and air vents in the building.

The comment that both the primary and secondary containment systems need to be evaluated is appropriate if there is the potential for catastrophic failure of the primary containment system. Given the level of security of the primary containment system, it is unlikely that any substantial spills will occur into the secondary containment system, but DMM has developed and submitted plans and specifications for the secondary containment system, which provides for sealing the system and allowing for drainage to a location where spills can be collected and removed. DEQ has required an ongoing Operating and Maintenance Plan to provide for routine cleanup of all spills of chemicals and other deleterious materials from the secondary containment, either returning them into the processing or treatment circuits of the mill or to appropriate disposal off-site. This should adequately provide for ICL's concerns.

Furthermore, by Rule and practice, DEQ does not place modified plans, resulting from response to public comments, in a continuous feedback loop of public comment that could easily result in no decision endpoints for the agency or an applicant.

In response to this and similar comments, DMM has submitted, for DEQ review and approval, engineering drawings, designs, and specifications for the mill building that depict these secondary containment features (stemmed walls). The designs and specifications were prepared "For Construction." Engineering drawings, designs, and specifications for the mill building have been signed and stamped by a Professional Engineer registered in the state of Idaho. The plans and specifications provide for appropriate sealing of seams and cracks. The Revised Operating Plans also provide for routine maintenance and cleanup of all spills of chemicals and other deleterious materials from the secondary containment, either returning them to the processing or treatment circuits of the mill, or sending them to appropriate disposal off-site.

Comment/Response 142.

Commenter: Idaho Conservation League

Violations of IDAPA 58.01.13 – Rules for Ore Processing by Cyanidation

IDAPA requires that applications contain certain key elements. These key elements include many items (see below) that were not adequately described in the permit application. Failure to include such required information in the application means that the application is incomplete and that the permit is not appropriately ready to be issued. These violations of IDAPA must be addressed prior to the issuance of a valid draft permit.

Once these violations of IDAPA have been corrected, DEQ needs to re-issue the completed draft permit for public comment.

ICL has no legal standing to make such determinations.

Comment/Response 143.

Commenter: Idaho Conservation League

Failure to comply with IDAPA 58.01.13.100.01

This section provides that a permit is required before a person can construct a facility which utilizes the cyanidation process without first obtaining a permit.

100. PERMIT AND PERMIT APPLICATION

01. Permit Required. No person shall construct a new facility prior to obtaining a permit from the Director. No person shall materially expand or materially modify a new or existing facility prior to obtaining a permit for such expansion or modification.

IDAPA 58.01.13.100.01

ICL staff have visited the area of the proposed mine and cyanidation process facility and report that the operator has begun constructing the impoundment. Furthermore, the Idaho Department of Lands also found that the operator had begun illegal construction before issuance of the permit.

Facility is defined in IDAPA 58.01.13.002.07 as:

07. Facility. For the purpose of these rules, a facility means that portion of an ore processing operation which utilizes cyanidation and which is intended to contain, treat, or dispose process water or process-contaminated water containing cyanide.

IDAPA 58.01.13.002.07

The tailings impoundment is a "portion of an ore processing operation" that "is intended to contain, treat, or dispose process water or process-contaminated water containing cyanide." Thus, the tailings impoundment is a portion of the facility.

Since the operator has begun construction of the general tailings impoundment facility without first obtaining a permit as outlined in IDAPA 58.01.13, the operator is in violation of Idaho law.

DEQ cannot approve a permit for the operation of this facility while this facility is in violation of Idaho law and the Rules governing the processing of ore with cyanide.

DEQ is very well aware of the contents of its rules, and does not concur with ICL's opinions that violations exist. However, DEQ is not willing to accept the current placement of fill as meeting the criteria defined in the engineering plans and specifications for foundation material underlying the constructed tailings impoundment.

Comment/Response 144.

Commenter: Idaho Conservation League

Failure to comply with IDAPA 58.01.13.100.03.f subparts (i) and (ii)

This section provides that certain materials or information are required to be a part of the application.

03. Contents Of Application. A permit application will be used to determine if the location, construction, operation, and closure of a proposed facility will be in conformance with these and other applicable rules including, but not limited to Idaho Department of Environmental Quality Rules, IDAPA 58.01.02, "Water Quality Standards and Wastewater Treatment Requirements," and Idaho Department of Environmental Quality Rules, IDAPA 58.01.08, "Idaho Rules for Public Drinking Water Systems". Information required shall include the following, in sufficient detail to allow the Director to make necessary application review decisions concerning design concept, environmental protection and public health:

f**.** A topographic site map and or aerial photos, except as provided in Subsection 100.04 of these rules, extending at least one (1) mile beyond the outer limits of the facility site, identifying and showing the location and extent of the following features:

All wells, springs, wetlands, surface waters and irrigation ditches within one (1) mile of the site boundary; All process water supply source(s); IDAPA 58.01.13.100.03

With regard to subpart (i): The applicant has failed to identify numerous seeps and springs that are located within one mile of the proposed facility. During the public meeting, other members of the public mentioned the failure to mention several nearby well sites. Our review of the IDWR water rights database reveals that there are numerous seeps and springs present and that there are active water rights held on them by the federal government.

DEQ agrees that the application neither reveals all of the ground water wells accurately nor adequately describes ground water conditions and geochemistry within ten miles of the site. . DEQ understands that many of these ground water expressions may or may not be present at the time a survey was conducted, and they are controlled largely by precipitation because this is a recharge area. Furthermore, DEQ has determined that the complexity of the local ground water system is such that it is unlikely to define that ground water system's steady state or dynamic state at any point in time. DEQ has, therefore, determined that the best strategy to provide for surface and ground water protection is to focus on requirements and criteria for source controls. DEQ has expressed this in its determination that a leak detection/leak collection system, its monitoring, and its operating and maintenance plan will ensure against risks to surface and ground water quality.

Comment/Response 145.

Commenter: Idaho Conservation League

With regard to subpart (ii): The applicant has failed to identify the source of facility process water.

The applicant does state, "Water supply will be by ground water wells (local); DMM will purchase water supply from current right holder" (Application page 6). This is not sufficient. Subpart (ii) clearly requires that the applicant divulge the source of all process water. A vague claim that process water will be purchased locally does not meet the requirement of this section.

The applicant also fails to describe the quantities of water needed for the operation. Although the cyanidation facility is designed to reuse as much water as possible, there are many instances of lost water throughout the operation. A certain volume of water will be lost through evaporation in the tailings impoundment before it can be recycled. Significant quantities of water will be needed for dust abatement throughout the grounds that are non-vegetated or paved. Additional needs include water for drinking, sanitation, and washing vehicles and equipment. These estimates need to be included for the application to be complete.

DMM has completed new water balance calculations for operations of its ore processing, mining and waste facilities, and fire suppression systems. DMM submitted the water balance calculations for DEQ's review.

Comment/Response 146.

Commenter: Idaho Conservation League

Our review of the IDWR water rights database reveals that there is currently no valid or active water right associated with the mine site and that there is not a valid water right in the general vicinity of the site that DMM could use as a source of water. The only water rights in the immediate area are owned by the federal government and for stock water. Further, even if there were a water right holder in the vicinity that did want to sell water to the applicant, Idaho water law would preclude the un-official alteration of the nature of the beneficial use and the location of use.

The Rules do not provide for analyses of water rights issues. However, DMM has completed what it proposes is a more accurate water balance calculation and has submitted this for DEQ's consideration.

Comment/Response 147.

Commenter: Idaho Conservation League

Section 100.04.c provides that in the case of an application for a small processing facility:

The Director may provide an exemption to any other requirement of Subsection 100.03 not set forth in Subsections 100.04.a. and 100.04.b., if by so doing, the Director has

sufficient information to determine potential impacts to the environment, public health or current or future beneficial uses of the waters of the state.

We are not aware that the Director has granted such and exemption. Such an exemption would be inappropriate in the instances of 100.03.f(i) and (ii) because these requirements specifically require information needed by the Director to determine "potential impacts to … current or future beneficial uses of the waters of the state." (IDAPA 58.01.13.100.04.c)

The Director did make that determination by following the application processing procedures, which included a pre-meeting with DMM, evaluating conceptual designs for the facilities, and accepting an application for a permit, which was supplemented by a revised permit application. The Director's determination was based on the contents of the application, supplemental materials, and DEQ's very specific and intimate knowledge of the structural geology, groundwater hydrology, mineralization, and ore body characteristics gained while staff studied the site for over two years between 1983 and 1985. DEQ presumed that these geologic conditions, which have taken millennia to develop, have not changed in two decades.

Comment/Response 148.

Commenter: Idaho Conservation League

The insufficient nature of the application violates IDAPA 58.01.13.*100.03.f(i) and (ii)* and hinders the agency and the public from being able to determine the true impacts that this proposal will have on human health, water quality and fish and wildlife. Desert Minerals Mining needs to resubmit a complete application and then the public needs to be provided an opportunity to review and comment on this proposal.

The Rules do not provide for any "public determination," nor do they substantiates ICL's assertion that violations of the Rules exist. DEQ's expertise and knowledge related to this site and the proposed operating procedures were sufficient to open a "Draft Permit" and application package for public review and comment. Subsequently, DEQ has provided for all legitimate concerns regarding water quality in requirements that will be contained in a Final Permit.

By Rule and practice, however, DEQ does not place modified plans, resulting from response to public comments, in a continuous feedback loop of public comment that could easily result in no decision endpoints for the agency or an applicant.

Comment/Response 149.

Commenter: Idaho Conservation League

Failure to comply with IDAPA 58.01.13.100.03.g

This section provides that certain materials are required to be a part of the application.

g. Topographic maps and/or aerial photos and an engineering report with drawings, except as provided in Subsection 100.04 of these rules, showing locations and design of those portions of the facility intended to contain, treat, or dispose process water or process-contaminated water containing cyanide. This information shall be of sufficient

detail to allow the Director to make necessary factual determinations concerning design competence and environmental protection and include: a drawing which shows surface gradients and flow of process solutions, predicted flow of runoff and run-on; design criteria and process schematic; leach pad and pond cross sections; typical details of liner systems for pads, ponds and process-related impoundments; treatment process schematics; and leak detection/monitoring system details. The facility design shall be certified by a registered professional engineer. . . .

IDAPA 58.01.13.*100.03.g*

Since the application, as provided to the public, completely lacks any information about how the tailings will be conveyed to the impoundment, information on leak detection and collection, leachate collection and removal, information specific to the design of the mill that will be used in this operation and even the location of the tailings impoundment, the application clearly fails to provide "sufficient detail to allow the Director to make necessary factual determinations concerning design competence and environmental protection." Attempts by DMM to describe updated and redesigned facilities during the public meeting are inadequate for this process.

Based on public comments and internal reviews, it is apparent that additional details were necessary to provide for tailings conveyance. However, by Rule and practice, DEQ does not place modified plans, resulting from response to public comments, in a continuous feedback loop of public comment that could easily result in no decision endpoints for the agency or an applicant.

In response to this and similar comments, DMM submitted engineering drawings, designs and specifications for the plumbing connecting the ore processing facilities and the tailings impoundment. These include pipe sizing, pipe materials, secondary containment (lined ditches), spill prevention measures and/or potential freeze protection for pipe(s), and, as with other drawings plans and specifications, have been stamped and submitted for DEQ's engineering review and approval. DEQ has approved these new designs and specifications.

Comment/Response 150.

Commenter: Idaho Conservation League

The insufficient nature of the application violates IDAPA 58.01.13.*100.03.g* and hinders the agency and the public from being able to determine the true impacts that this proposal will have on human health, water quality and fish and wildlife. Desert Minerals Mining needs to resubmit a complete application and then the public needs to be provided an opportunity to review and comment on this proposal.

DEQ does not agree. The extension of the public comment period, receipt of public comments, discussion with DMM, concessions by DMM, and internal reviews have significantly modified the requirements for water quality protection. These required modifications are in the plans and specifications for construction and operation, most of which will be incorporated as Final Permit requirements.

However, by Rule and practice, DEQ does not place modified plans, resulting from response to public comments, in a continuous feedback loop of public comment that could easily result in no decision endpoints for the agency or an applicant.

Comment/Response 151.

Commenter: Idaho Conservation League

Failure to comply with IDAPA 58.01.13.100.03.h(iii)

This section provides that certain plans and strategies are required to be a part of the application.

h. An operating plan, except as provided in Subsection 100.04 of these rules, that includes:

iii. A water management strategy that describes the process water balance and the methods to manage all process water, process-contaminated water, and runoff or run-on water, emergency releases, and excess water due to flood, rain, snowmelt, or other similar events. The strategy shall include the basis for impoundment volumes and all estimations. . . .

IDAPA 58.01.13.100.03.h(iii)

The applicant has failed to comply with this provision because the application does not contain any discussion regarding how Desert Minerals Mining calculated that their process water needs would be 25 gallons per minute. Without the ability to review these calculations, there is no means for the reviewer to determine if the impoundment volume will be adequate.

This omission needs to be corrected in the application and the public needs to be provided with an opportunity to review and comment on an updated application and permit.

DEQ does not agree that this section has not been addressed.

Failure to comply with IDAPA 58.01.13.100.04.a

This section provides that certain materials are required to be a part of the application.

04. Application For A Small Mineral Processing Facility And Pilot Facility. The owner or operator of a proposed facility or the owner's or operator's authorized representative shall make application to the Director in writing of the intent to operate a small mineral processing facility or a pilot facility. The application shall include an explanation as to why the proposed facility qualifies as a small mineral processing facility or a pilot facility. The application must further meet the requirements of Subsection 100.03 in the following manner:

a. The application must contain plans and specifications certified by a registered professional engineer in accordance with Section 39-118A, Idaho Code; and

IDAPA 58.01.13.100.04.a

The Desert Minerals Mining application violates this section of IDAPA because the applicant has failed to include plans for the facility which have been approved by a registered professional engineer.

The application does include a document entitled "Specifications for Centennial Mine Processing Facility, Small Scale Tailings Facility." While this document is signed by a registered Professional Engineer, it does <u>not</u> include plans, designs, diagrams, etc of the

proposed facility. Rather, this document is only a written guide for how to execute certain tasks.

Not only were the plans (Figures 4A, 5 and 6 in the application) not certified by a registered professional engineer, the plans that were submitted as part of the application (as made available to the public) are not even "final" plans. Figures 4A, 5 and 6 are all marked "PROGRESS PRINT - NOT FOR CONSTRUCTION."

IDAPA requires that plans be certified by a registered professional engineer in recognition of the fact that improperly designed facilities poise a significant threat to human health, water quality and fish and wildlife. The submittal of "progress prints not for construction" does not meet the IDAPA requirement.

DEQ has noted these details in the revised application and Draft Permit. DMM has subsequently modified its engineering designs and specifications for construction purposes and had them signed and stamped by a registered professional engineer. These modified plans and specifications were submitted for DEQ's review and approval. DEQ has reviewed them, and, with few minor clarifications, has approved of the modifications.

Comment/Response 152.

Commenter: Idaho Conservation League

Failure to comply with IDAPA 58.01.13.200.01

This section requires that certain measures be taken to protect water quality.

200. REQUIREMENTS FOR WATER QUALITY PROTECTION.

The following minimum design and performance standards are intended as a baseline for protection of public health and for the waters of the state. These standards shall apply to all facilities unless the Director approves, based on an applicant's site-specific information that compliance with a specific standard is not required to protect water quality and the public health

Containment Design Criteria. A facility shall be designed to contain the maximum expected normal operating water balance and the one hundred (100) year, twenty-four (24) hour storm event. Snowmelt events shall be considered in determining the containment capacity. Contingency plans for managing excesses of process water or process-contaminated water shall be described in the water management strategy.

IDAPA 58.01.13.200

The applicant has failed to include the required "Contingency plans" for managing excesses of process water or process-contaminated water. These plans are not described in the water management strategy. The application contains no information describing how the operator will manage excesses of process water or process-contaminated water. The applicant's "water management plan" (located on pages 18 and 19 of the application) discusses in brief detail that steps will be taken to limit non-process water (i.e. rain and runoff) from entering the impoundment. However, there is no discussion – no "contingency plan" for how the operator manage excesses of process water in general or with regards to excess process water in the impoundment.

As previously noted, the application (and the permit) lack information about any sort of leachate collection and removal system in the impoundment. We believe that this sort of system is required to ensure that the operator can manage excess process water in the impoundment.

Desert Minerals Mining needs to develop the required components of the water management plan and re-submit a completed application to DEQ. DEQ then needs to re-issue a draft permit for public comment.

DEQ does not agree that this section has not been addressed. Subsequent to the original application, DEQ's review, and public comments, DEQ required that numerous additional engineering designs and specifications be developed and submitted prior to issuance of the Director's determination. These modifications or amendments to the engineering designs and specifications were developed, reviewed, and approved by DEQ prior to the Director's determination.

By Rule and practice, DEQ does not place modified plans, resulting from response to public comments, in a continuous feedback loop of public comment that could easily result in no decision endpoints for the agency or an applicant.

Comment/Response 153.

Commenter: Idaho Conservation League

Insufficiencies in key items that are included in the permit

Several of the measures contained in the permit are not sufficient to ensure that human health, water quality and fish and wildlife are protected.

***Impoundment lining not sufficiently protective*: While we appreciate DMM's commitment to construct a secondary liner system, this updated design is not yet available to the public. Lacking this information, our comments are directed at the outdated material presented in the application currently available for review.**

ICL has not provided any valid argument that their review and approval is specifically needed to ensure that any system or design is protective of human health or the environment.

Comment/Response 154.

The nature of the material to be deposited in the tailings impoundment and the fact that the impoundment will become the permanent repository for this waste argue that a secondary liner needs to be incorporated into the design of the impoundment. A secondary liner will provide more appropriate protection against discharges in the short-term and will further provide for the long-term stability of the site.

The value of a secondary liner is well established and commonplace when designing hazardous waste facilities. We are attaching a chapter from the US Army Corps of Engineers manual on this matter (TM 5-814-7). This material provides an excellent overview of various design considerations. It is worth noting that for a impoundment intended to hold materials similar to the Desert minerals Mining proposal, the Department of the Army would require a liner system consisting of the following components: leachate collection and removal system above primary liner, primary liner

of synthetic material, secondary liner of clay soil or synthetic material leak detection system between liners. (USACE TM 5-814-7, page 6-3)

DMM has submitted final engineering drawings, designs and specifications and appropriate narrative for DEQ approval. These designs ad specifications describe the storage capacity of the leak detection and collection system, have been signed and stamped by a Professional Engineer registered in the State of Idaho, and, subject to DEQ approval, will be incorporated in the Final Permit. Each and every page of the engineering drawings, designs, and specifications "For Construction Purposes" have been stamped.

The permit will stipulate that the leak detection and collection system will be monitored twice daily, once in the morning and once in the evening, at approximately twelve hour (12) intervals. The permit will provide that whenever the volume of water in the collection system can be pumped, it will be pumped back to the milling facility for use and subsequent treatment prior to discharge to the tailings impoundment.

Comment/Response 155.

Commenter: Idaho Conservation League

***Impoundment liner base not adequately protective*:** **The permit requires that the operator apply the HDPE liner over "a prepared sandy base in accordance with the Ore Processing Rules. The base shall be prepared in place by scarification, moisture conditioning and compaction, with removal of oversized particles" (at permit page 10-11, #6). Further, at page 11 #7, the permit directs the impoundment and liner be constructed to meet or exceed the construction specifications provided in Appendix 1 of the application.**

However, the "Liner Bedding Material" specifications outlined in Appendix 1 of the application provide that the liner bedding may be constructed of "rock particles" up to three inches in size. This will not be adequately protective of the liner. We are also concerned about the possibility that other materials such as debris from previous mining operations, barbed wire, litter, and vegetation may also compromise the liner's integrity.

Further, there is no provision to ensure that the liner bedding is not constructed out of sharp or angular rock – the type that might be common at a mine site with recent excavation and rock crushers on site. If recently broken rock or other sharp edged rock is used in the construction of the liner bedding area there is a great risk that the liner will be punctured.

The US Army Corps of Engineers document cited earlier provides for much more stringent specifications when placing a liner on subgrade. Here, it notes:

Protection of the liner involves proper preparation of the subgrade and placement of protective soil layers. Procedures to be used in preparation of the surface include compaction, scraping and rolling to provide a smooth surface for the liner. A minimum 6-inch layer of material not coarser than sand (classified by USCS as SP or SW, with less than 5 percent passing the No. 100 sieve) is recommended by the EPA as a protection against puncture, equipment damage, and exposure to the elements; . . . Page 6-9.

It further notes,

Heavy geotextile fabrics (>a 400 g/m2) are increasingly being used in combination with flexible membrane liners in hazardous waste units to protect the membranes from puncture and abrasion. In surface impoundments, geotextiles are also used for gas relief beneath membranes (Collins and Newkirk, 1982). In addition, geotextiles may also serve as a clean base for seaming membrane panels. Page 6-9

Proper preparation of the liner's subgrade is critical to the proper functioning of the liner. As described in the application and allowed in the draft permit, the subgrade of the liner at the proposed facility will not be properly protective.

DEQ needs to direct Desert Mineral Mining to install a secondary liner, possibly of clay, overlaid with geotextile fabric, beneath the primary synthetic liner. A secondary clay liner will not only serve as a back up liner in the event of a leak, it will also ensure that the materials under laying the primary liner are small enough grain so that they will not puncture the liner. The geotextile fabric will ensure that there is a clean, sound surface beneath the liner to aid in achieving a good seam seal when constructing the primary liner.

DEQ agrees with the comments pertaining to prohibiting inclusion of sharp or angular materials that can cause puncturing of the liners. However, there are alternatives to ICL's proposed criteria, which appear to be based on outdated information pertaining to hazardous waste repositories rather than impoundments. There is no data that points towards the tailings as being or becoming hazardous.

DMM has submitted final engineering drawings, designs and specifications, and appropriate narrative for DEQ approval. These designs and specifications, which describe the storage capacity of the leak detection and collection system and have been signed and stamped by a Professional Engineer registered in the state of Idaho, and which are subject to DEQ approval, will be incorporated in the Final Permit. Each and every page of the engineering drawings, designs and specifications "For Construction Purposes" have been stamped.

The permit will stipulate that the leak detection and collection system will be monitored twice daily: once in the morning and once in the evening at approximately twelve hour (12) intervals. The permit will provide that whenever the volume of water in the collection system can be pumped, it will be pumped back to the milling facility for use and subsequent treatment prior to discharge to the tailings impoundment.

Comment/Response 156.

Commenter: Idaho Conservation League

Operator already violating design specifications outlined in application: Appendix 1 of the application outlines steps to be taken during the construction of the impoundment. Part 3.2 of this document describes impoundment site preparation and includes items such as clearing the site of roots and brush, remove organic material from site, etc. Part 3.0 describes removing the topsoil from the site. Part 3.6 directs that fill will be deposited on site in 12-inch (un-compacted) lifts (or layers).

ICL staff recently visited the general area of the mine site. From a vantage point on public land, we saw that the operator is currently (without receiving appropriate permitting) bulldozing the site and constructing the impoundment. All of the Appendix 1 sections cited above (3.2, 3.0 and 3.6) are currently being violated. Vegetation and other organic material are being bulldozed into the fill and fill is being pilled in "lifts" significantly greater than 12-inches.

On December 17, 2004, the Idaho Department of Lands issued a formal notice of noncompliance following two inspection reports that noted numerous permit violations. These violations included failure to salvage topsoil, improper road construction, failure to submit a reclamation bond, and failure to install proper erosion control measures.

We believe that, as much as it pertains to the scope of the cyanidation permit, DEQ should include additional stipulations in the permit to address these issues. For example, failure to segregate topsoil and vegetation during construction of the impoundment could have resulted in sticks and unconsolidated material being placed at the base of the tailings impoundment. This type of material could result in a tear in the liners and should be completely removed before construction continues. The cyanidation permit should require DMM to regrade these areas and place suitable substrate for the base of the impoundment.

We find it deeply disturbing that the operator has begun to construct the impoundment prior to receiving the appropriate permitting and that the operator is not even complying with the construction specifications that they included in their application. This does not bode well for future compliance issues on the site.

In addition, we understand that one of the contractors, Don Blow, has had issues with some of his operations on a separate dredge and placer mining operation, permit #279 from the Idaho Department of Lands.

DEQ cannot approve a final permit for this facility if the facility is already in violation of conditions that will be in the permit. If Desert Mineral Mining wishes to further pursue this proposal, the operator needs to remove the partially constructed impoundment and begin again.

Fuel storage not protective: The elevated fuel tank that was visible when we visited the area did not have a secondary containment system underneath it. This oversight is a violation of best management practices.

The permit directs that the future fuel storage area be located as depicted in Figure 4 of the application (Permit at page 13 #4). However, Figure 4 has the fuel storage located on the far side of the impoundment, separated from the road with truck turnaround by over 300 feet (and across the impoundment). Presumably, the fuel will be made available to vehicles and equipment on the road via pipes. The piping system used to put fuel into the tanks and to fuel vehicles needs to be described. As with the need to appropriately engineer and construct the piping to convey the tailings to the impoundment, fuel piping needs to be engineered and constructed to protect against failure. Secondary containment systems need to be incorporated. Fuel spills in the local water supply can adversely affect human, livestock, and wildlife health. The fuel storage and transfer system designs need to be specified in the permit application and submitted for public review.

By Rule and practice, DEQ does not place modified plans, resulting from response to public comments, in a continuous feedback loop of public comments that could easily result in no decision endpoints for the agency or an applicant.

Comment/Response 157.

Commenter: Idaho Conservation League

Lack of final designs: Critical components of the application are presented in non-final form. For instance, the engineering drawings that depict the impoundment and key features of the impoundment are not final designs and have not been signed by a Professional Engineer. The plans submitted to DEQ and relied upon by DEQ to draft this permit are actually marked "NOT FOR CONSTRUCTION."

Further, as noted previously, site maps do not show the accurate location of key facilities – like the impoundment. The diagrams purported to describe the cyanidation mill to be used on the site are instead "generalized" and merely show a generic mill.

The failure to provide adequate (and required) information hinders DEQ and the public from adequately reviewing this proposal. Desert Mineral Mining needs to correct these inadequacies and then the public needs to be provided with an opportunity to review and comment on completed plans and an updated draft permit.

By Rule and practice, DEQ does not place modified plans, resulting from response to public comments, in a continuous feedback loop of public comments that could easily result in no decision endpoints for the agency or an applicant.

Comment/Response 158.

Commenter: Idaho Conservation League

Need for additional surface water monitoring sites: There is currently no monitoring site in the Bender Creek watershed. Sites in Bender Creek are required because there are a number of seeps which are adjacent to the mine site which drain into the Bender Creek watershed. See Figure 7 in the application.

The area of groundwater infiltration that serves as the "source" for these seeps is not revealed in the application. However, judging from the maps provided and the discussion on the relative shallowness of the groundwater – combined with the fact that the only area higher in elevation than the seeps is the mine site – additional surface water monitoring sites are needed.

DEQ does not agree. There are many influences that may or may not affect water in these watersheds, including the expanding multiple uses by agricultural and recreation interests, yet none of these interest groups provide for surface water quality monitoring. Because of these and other natural aspects in the watershed that affect water quality, the monitoring requirements are focused close to the potential sources at the mine site.

Comment/Response 159.

Commenter: Idaho Conservation League

Concern over applicant's statement that mine site "does not drain to Wood Creek:" Drainage to Wood Creek would be of special concern because Wood Creek is a tributary to the South Fork of the Boise River and Arrowrock Reservoir. The applicant's statement that the mine site "does not drain to Wood Creek" (Page 7 of application) is not supported by any information found in the application. Indeed, a review of Figure 7 (which shows numerous springs and seeps in the vicinity of the mine) reveals that there is a spring immediately Northeast of the site that does indeed drain to Wood Creek.

Agreed. However, the storm water drainage from the entire mine site is not the focus of the cyanidation permit. Nevertheless, the close proximity of storm water management systems to the divide provides sufficient risk as to warrant monitoring in Woodtick Creek. Other storm water monitoring requirements, relative to the mine site as a whole, may be considered part of DMM's operating plans described in the Reclamation Plans or EPA's Stormwater management Program.

EPA has determined that discharges of pollutants from the facility to waters of the U.S. are prohibited by the Clean Water Act, unless specifically authorized by an NPDES permit. These requirements apply to process water and storm water that may be discharged from such a facility. Thus, if there is a reasonable potential for process water to discharge from the facility to waters of the U.S., then the facility must apply for an individual NPDES permit from EPA. If there is a reasonable potential to discharge storm water from the facility during the construction or operational phases, then the facility must seek authorization to discharge from EPA by complying with terms and conditions of the storm water general permit prior to construction or operation.

Comment/Response 160.

Commenter: Idaho Conservation League

This spring, which has a history of flowing 11 gallons per minute, is adjacent to the mine property boundary and is located high in the drainage. The area of groundwater infiltration that serves as the "source" for these seeps is not revealed in the application. However, judging from the maps provided and the discussion on the relative shallowness of the groundwater – combined with the fact that the only area higher in elevation than the seeps is the mine site – there can be little doubt that groundwater under the mine site feeds this spring. Thus, discharges on site may indeed drain into Wood Creek and the South Fork of the Boise River.

Similarly, as noted previously, numerous seeps adjacent to the mine site flow into the Bender Creek watershed, which is also a tributary to the South Fork of the Boise River.

One further observation on the potential for this site to drain to a tributary of the South Fork of the Boise is the fact that mine property straddles the watershed divide and physically extends into both Wood Creek and Blacks Creek. As described previously, Wood Creek and Bender Creek flow into the South Fork of the Boise River and Blacks Creek flows south into Blacks Creek Reservoir. Surface flows from the mine property currently drain into both drainages. The current topography of the site will be

significantly altered as a result of the proposed mining. The application does not include any information about the post-mining topography or reclamation of the site. It is likely that drainage to Woods Creek will continue and could actually increase depending on the post-reclamation topography and adit-affected hydrology.

Agreed. However, the storm water drainage from the entire mine site is not the focus of the cyanidation permit. Nevertheless, the close proximity of storm water management systems to the divide provides sufficient risk as to warrant monitoring in Woodtick Creek. Other storm water monitoring requirements, relative to the mine site as a whole, may be considered part of DMM's operating plans described in the Reclamation Plans or EPA's Stormwater management Program.

Comment/Response 161.

Commenter: Idaho Conservation League

Limits need to be placed on amount of chemicals stored on site: The permit needs to contain limits on the amount of individual chemicals that can be stored on site and any one time. Note that the permit does place a limit on the amount of diesel that can be stored on or transferred to the site at any on time.

Placing limits on the quantity of toxic, corrosive or otherwise harmful chemicals stored on site will serve to minimize that damage that can be done in the even of a facility failure. Likewise, in the event that the facility is abandoned, there will be less material to dispose of properly. DEQ should also place limits on the quantities of hazardous materials transported to the mine site at one time. This provision is particularly important given the high potential for vehicle accidents on this particular stretch of road.

The Rules do not provide for ICL's proposed limitations of chemical storage. We do however believe that only engineered containment and proper transportation use, handling and disposal practices prevent unauthorized releases. DEQ has determined that the designs of the storage facilities are adequate for the limited amounts of chemicals that will be stored and used at the site.

Comment/Response 162.

Commenter: Idaho Conservation League

Storm water NPDES required: The application does not discuss the need for Desert Minerals Mining to apply for and receive an NPDES permit for stormwater discharge. However, it is apparent that one will be required. Please ensure that the applicant is aware of this need.

The application for an NPDES permit is also a Federal nexus. If the wastewater will be directed into the Wood Creek drainage, the US Fish and Wildlife Service and the Boise National Forest will also need to review this application.

EPA has determined that discharges of pollutants from the facility to waters of the U.S. are prohibited by the Clean Water Act, unless specifically authorized by an NPDES permit. These requirements apply to process water and storm water that may be discharged from such a facility. Thus, if there is a reasonable potential for process water to discharge from the facility to waters of the U.S., then the facility must apply for an individual NPDES permit

from EPA. If there is a reasonable potential to discharge storm water from the facility during the construction or operational phases, then the facility must seek authorization to discharge from EPA by complying with terms and conditions of the storm water general permit prior to construction or operation.

Regulation of storm water under the NPDES Program rests with EPA. EPA and DMM have the responsibility to collaborate on the administrative, permitting and implementation of that program at the mine site

Comment/Response 163.

Commenter: Idaho Conservation League

Response time in the event of an accident

While we appreciate learning some of the details on the spill prevention and containment plan, the permit application should include additional information on the response time by emergency crews in the event of a hazardous chemical spill. Specifically, we would like to know the estimated response time for paramedics, the fire department, HAZMAT crews, DEQ staff, and law enforcement officers.

Although DEQ does not necessarily disagree with the inference that response times for emergency situations is critical to mitigating a situation, response time has never, to the best of our knowledge, been a criteria for determining whether or not a proposal is adequate and should or should not be approved.

Comment/Response 164.

Commenter: Idaho Conservation League

Security at the mine site and during transportation of hazardous materials

Given security concerns over the storage and transportation of hazardous materials, the applicant needs to provide additional information about security measures. We recommend that DMM hire both an on and an off-site security team that can monitors the site through surveillance cameras.

Noted.

Comment/Response 165.

Commenter: Idaho Conservation League

Recreational shooting of road signs and deer hunting of road signs are also common occurrences in the Danskin area. DMM should address the vulnerability of equipment from gunfire from recreational vandalism and careless hunters. Sensitive equipment should be housed within the protective structure. Fence lines should be inspected regularly.

Noted.

Commenter: Idaho Conservation League

***Selling waste as fertilizer not sufficiently discussed*: T**he notion of selling the tailings waste as fertilizer receives scant attention in the application and insufficient discussion in the public meeting.

The only mention of this scheme in the application is found on page 13, which notes that monthly testing of tailings waste is "consistent with DMM's desire to evaluate the feasibility of potentially using treated spend ore for other commercial compost manufacturing applications."

If Desert Minerals Mining does wish to sell its waste as fertilizer, the permit application needs to contain details on how this waste be removed from the impoundment. The impoundment as designed will not allow entry by any sort of front loader or other vehicle to remove the waste. Similarly, the liner and impoundment walls as designed is not intended to withstand the abuse that a heavy, moving piece of equipment would inflict on it.

As designed, this impoundment is intended to be a depository for waste, not a place to store and then retrieve waste.

Desert Mineral Mining needs to reveal the true nature of their plans to DEQ and the public. If Desert Minerals Mining does intend to remove waste from the impoundment, then the impoundment described in the application and the permit is woefully inadequate. Whether or not the applicant intends to store the tailings in the impoundment permanently or temporarily determines the ultimate capacity of the impoundment and the impacts should the impoundment leak or fail. The applicant needs to clarify this matter and, if the applicant does intend to attempt to remove waste from the impoundment, the application needs to be amended to reflect a different impoundment design.

The application also needs to describe specifics for any temporary storage facility for the neutralized tailings. DEQ needs to describe minimum standards that the tailings material would be met before any mining waste is transferred off site and distributed by other parties as fertilizer. We are particularly concerned about the spread of contaminants that could be placed in areas that are more sensitive. DEQ then needs to provide the public with an opportunity to review and comment on this matter.

DEQ is providing criteria for approved final storage of wastes on and off site. However, DMM's discussions or analyses of wastes that they turn into products are not critical to the Director's determination.

By Rule and practice, DEQ does not place modified plans, which resulted from response to public comments, in a continuous feedback loop of public comments that could easily result in no decision endpoints for the agency or an applicant.

Comment/Response 166.

Commenter: Idaho Conservation League

***Confusion over volume of impoundment*: The application alternately states the following figures:**

"The facility is 11.5 feet deep and holds approximately 10,000 tons of tailings with operating freeboard" (page 3).

. . .

"The initial tailings impoundment configuration is expected to allow for approximately 36,500 tons of contaminant for the initial small scale test" (page 3).

It is unclear whether the impoundment holds 10,000 tons or 36,500 tons.

DEQ will stipulate that the final volume of tailings in a Final Permit is based on the final design criteria of the tailings impoundment, which is 22,000 tons. This is an amount approved by DEQ.

Comment/Response 167.

Commenter: Idaho Conservation League

***Human waste not addressed*: It is our understanding that Desert Minerals Mining plans to operate the facility with a staff of ten or more employees – several of which may live on site. This number of personnel on site will create a significant amount of human waste. Failure to adequately manage this waste will threaten human health and harm water quality.**

The applicant needs to address this matter via an updated application.

DEQ does not agree. This issue falls under the jurisdiction of the county and district health departments.

Comment/Response 168.

Commenter: Idaho Conservation League

***Concern over existing (historic) mine tunnels on site*: The general area in which this mine and processing facility is proposed has been extensively mined in the past. Our investigation into the site reveals that there are numerous old mine works – including tunnels, adits, etc – at this site. These old workings may have implications for the proposed operation and need to be considered.**

The operator fails to note the presence and location of these old mine work in the application. Lack of knowledge regarding the exact location of old tunnels could result in constructing key parts of the facility in unstable areas. For instance, it would be inappropriate (and unsound) to construct the impoundment facility on top of old mining tunnels. Doing so would jeopardize the stability of the impoundment and could result in a failure of the impoundment's foundation, leaks or even a catastrophic failure of the entire impoundment.

In addition, old tunnels and mine works may impact the way that surface water and ground water move around the site. In the event that surface or groundwater is contaminated as a result of this operation, these contaminates may move through the ground in unexpected directions should they encounter the old mine works. As noted previously in our comments, the area has numerous seeps and springs. In some instances, these features may be associated with historic mining activity and there may

be evidence already on site of mine history mine workings altering the flow of ground water.

DEQ needs to return that application to the operator and instruct the operator to document the existence and location of history mine works, field verify these locations, evaluate the implications that these historic works may have on future operations and ensure that proposed facilities are appropriately sited.

Although there have been underground mines in the area, there are no local indications or surface expressions that subsidence has occurred as a result of multiple use activities at the site. Furthermore, the 22,000 tons of rock removed from the pit, processed, and transferred approximately 600 feet to the impoundment is a relatively insignificant change in the surface loading conditions.

Comment/Response 169.

Commenter: Idaho Conservation League

***Concern over existing mine related discharges on site*: As previously noted, the area in question has many historic underground mine working and numerous seeps and springs either on the site or nearby. The water quality data presented in the application, taken into consideration with the known and/or suspected location of history underground mine works, highlights that this area may currently have water quality issues of concern.**

Surface water data submitted in the application cover two drainages – Blacks Creek, to the south, and Wood Creek, to the North. The proposed mine sites at the ridge dividing these two drainages. The applicant states that all drainage from the site will drain towards Blacks Creek. We find that this assumption is not supported by the facts.

The applicant has submitted various water quality sample data from the late 1980's. A number of surface water sample sites (referred to as SW) were tested. A review of the water quality data reveals that the water quality in the upper reaches of Blacks Creek close to the mine site (SW 1 [high in Blacks Creek] and SW 7 [also high in Blacks Creek]) is different than the water quality in the upper reaches of Wood Creek close to the mine site SW 4 [high in Wood Creek]). This difference is unexpected; since in theory these streams – with their headwaters adjacent to each other and sharing geological composition – should receive very similar quality rainwater, surface water and groundwater discharges.

The data reveals that there are significant differences in alkalinity, hardness, sulfate, total suspended solids and magnesium between Woods Creek and Blacks Creek.

	alkalinity	hardness	Sulfate	TSS	Magnesium
SW 1 (Blacks Ck)					
April 13, 1989	24	NA	2.3	21	1.0
May 16, 1989	43.4	43.7	2.3	5.0	1.5
June 20,	NA	NA	NA	NA	NA

1989					
July 19, 1989	**NA**	**NA**	**NA**	**NA**	**NA**
August 18, 1989	**NA**	**NA**	**NA**	**NA**	**NA**
SW 7 (Blacks Ck)					
April 13, 1989	**30.8**	**NA**	**5.0**	**5**	**0.60**
May 16, 1989	**NA**	**NA**	**NA**	**NA**	**NA**
June 20, 1989	**56**	**55.5**	**1.8**	**5**	**1.35**
July 19, 1989	**88**	**52.4**	**7.1**	**4**	**1.01**
August 18, 1989	**80**	**53.9**	**10**	**94**	**0.937**
SW 4 (Wood Creek)					
April 13, 1989	**87.9**	**NA**	**7.7**	**20**	**1.5**
May 16, 1989	**121**	**141.1**	**21.7**	**2.0**	**3.6**
June 20, 1989	**126.9**	**113**	**8.9**	**7**	**3.25**
July 19, 1989	**129**	**115**	**5.9**	**2.0**	**3.29**
August 18, 1989	**160**	**131.9**	**5**	**3**	**3.71**

Since these two creeks have adjacent headwaters and similar geologies, we would expect that their water quality data would be virtually identical. This is not the case.

The data above exhibits several interesting trends between Blacks Creek and Wood Creek:

Alkalinity tends to be higher in Wood Creek

Hardness tends to be higher in Wood Creek

Sulfate tends to be higher in Wood Creek

TSS tends to be higher in Blacks Creek

Magnesium tends to be higher in Wood Creek

We postulate that the water quality data shows that Wood Creek at SW 4 was, at the time of sampling, being impacted by groundwater discharges – perhaps from the old mine works underlying the Centennial Mine site which are noted on various USGS maps of the site – while Blacks Creek at SW 1 and SW 7 seems to be more influenced by surface water run off from the Centennial Mine site. The higher TSS levels at Blacks Creek highlights influences due to erosion from the site. The elevated water chemistry in Wood Creek highlights possible mining related groundwater discharges.

Current and historic pollutant levels in Wood Creek (potentially via groundwater) call into doubt the applicants claims that all discharges from the proposed DMM project

will remain in the Blacks Creek drainage and highlight the potential for contaminants to enter the Boise River watershed.

Prior to issuing a final permit to the applicant, DEQ needs to direct the applicant to provide additional information about historic and current groundwater flow and pollutant transport from the site. Further, in light of the potential for groundwater to exit the site and enter the Boise River Watershed, DEQ needs to require the applicant to utilize a secondary liner system in the impoundment design.

DEQ agrees that the application neither reveals all of the ground water wells accurately nor adequately describes ground water conditions and geochemistry within ten miles of the site. However, DEQ also believes that the water quality data can be affected by other multiple use activities than are more prevalent in the Woodtick Creek area than in the Blacks Creek area and that the relative affects of each individual activity is impossible to discern. Indeed, qualitative analyses of multiple uses in the Woodtick Creek and Blacks Creek drainages indicate erosion is far more prevalent in areas used by recreational activities, which focus on the Danskins east and northeast of the mine, than by grazing and mining in Blacks Creek. Therefore, DEQ has determined that the requirement of source controls, in the form of the leak detection/leak collection system, its monitoring, and its operating and maintenance procedures, sufficiently addresses the risks to surface and ground water quality.

The Draft need not be modified to respond to this comment.

Comment/Response 170.

Commenter: Idaho Conservation League

***Bonding not sufficient*:** **DEQ has directed Desert Minerals Mining to provide a bond in the amount of $25,000. This amount is insufficient to ensure that the cyanidation process equipment, chemicals, impoundment and any discharges are cleaned up in the event that the operator abandons the site or other wise fails to appropriately place the site in a state of long-term closure.**

IDAPA 58.01.13.650 provides for the establishment of financial assurance (bonding) for permanent closure of the site. Subpart 02 if this section provides guidance as to the amount of the bond. Idaho's Rules for Ore Processing by Cyanidation appear to severely bind the hands of DEQ staff to require a bond amount sufficient ensure appropriate closure of cyanide processes and mine related discharges.

We believe that the provisions of IDAPA which serve to offer guidance for setting the bond amount are contradictory to the provisions of Idaho statute that provide for DEQ the authority to require a bond. Idaho statute states:

39-118A. ORE PROCESSING BY CYANIDATION.

(2) . . . The director may require a reasonable fee for processing permit applications, and financial assurance for permanent closure of a new ore-processing facility, or a modification or expansion to an existing ore-processing facility.

TITLE 39 HEALTH AND SAFETY CHAPTER 1, ENVIRONMENTAL QUALITY – HEALTH, 39-118A. ORE PROCESSING BY CYANIDATION.

This statute provides that the Director of DEQ may require "financial assurance for permanent closure of a new ore-processing facility." IDAPA 58.01.13.650.02 hinders the Director's ability to set the bond amount at a level sufficient "for permanent closure." Thus, IDAPA and statute are in conflict. In such instances, such as this, DEQ needs to look the to the underlying statute for guidance. With regard to the Desert Mineral Mining bond, DEQ needs to significantly increase the bond amount to ensure that there are resources available to permanently close this facility. We appreciate DMM's verbal commitment to increase the bond to a more appropriate amount, but the permit contains no additional information as to what this recalculated amount is.

The requirement of a $25,000 bond is specifically tied to ensuring neutralization of process wastes and waste water if the facilities are abandoned. DEQ's authorities do not extend to requirements of personal and property liability or catastrophic environmental liability insurance.

By Rule, DEQ cannot change its requirement of a $25,000 bond.

Comment/Response 171.

Commenter: Idaho Conservation League

***Legal structure of applicant*: IDAPA 58.01.13.100.03.d requires that that applicant provide information regarding the "legal structure (corporation, partnership, etc)" of the applicant. For the proposed operation, the applicant has reported this to be "Laguna Pacific Partners, LLC," a limited liability corporation. Desert Mineral Mining, LLC (DMM) is also mentioned, though their connection to Laguna Pacific Partners, LLC is not stated, DMM appears to be the company that would operate the site. Both companies provide the same California mailing address. However, both companies are incorporated in the state of Nevada. Dan Terzo is listed as the contact person for this application.**

We have reviewed the information available on these two corporations at the Secretary of State's office in Nevada. Dan Terzo is listed as the managing officer for both corporations.

Interestingly, Daniel Terzo has up to 19 incorporated entities registered under his name in the state of Nevada; many in various states of "default" or having been "revoked."

Mr. Terzo's business partner in Desert Mineral Mining, LLC and Laguna Pacific Partners, LLC, a Gregg Corlyn appears to be associated with up to 17 incorporated entities in the state of Nevada.

Being an officer in so many limited liability corporations is not necessarily inappropriate. However, it does cause us some concern that assets and resources needed to ensure that this project is operated correctly and closed appropriately will not be available. Shifting liability and resources between various incorporated entities could affect the ultimate closure of the site and may have ultimate implication for human health and water quality protection.

Due to the history of mining related interests shifting assets around to avoid liability for clean up, and the apparently complex nature of the legal structure of the entities proposing to operate this mine and cyanide processing facility, we urge the DEQ to carefully review these matters and ensure that resources will be available to permanently close this site.

We also note with some concern that neither Desert Mineral Mining, LLC nor Laguna Pacific Partners, LLC are registered with the California Secretary of State's office to do business in the state of California. Thus, neither company has a California Business License. Further, neither the California Franchise Tax Board nor the California Board of Equalization has records of either company paying taxes to the State of California. This discrepancy is of concern because both companies have represented themselves as California based companies.

Further research has revealed that Mr. Terzo does have a similar named (though separate) Nevada incorporated LLC registered to do business in California. This LLC, "Desert Mineral Technology Unlimited, LLC" was registered to do business in California on 1/18/2002. State of Nevada records indicated that the Nevada incorporation status of this entity (Desert Mineral Technology Unlimited, LLC) has been "revoked."

The complicated status of Desert Mineral Mining, LLC, Laguna Pacific Partners, LLC and other corporations that may or may not be connected to these corporations and their officers causes us grave concern.

If this mine goes forward it is imperative that the operator has sufficient resources to design, construct, operate and close this facility. In addition, in the event of a failure, sufficient resources to ensure that the situation is cleaned up and that human and environmental health is protected. Our concerns are heightened by the fact that the cyanide bond required by DEQ is not sufficient to perform clean up for all by the most minor events.

Part of ensuring that there are sufficient resources to correctly operate this mine is understanding the corporate structure of the operator and ensuring that the operator can be held legal and financially responsible for clean up. DEQ must not issue a cyanide permit to this operator until it can be demonstrated that this operator has sufficient resources and can be held liable in the event of a cyanide spill or other failure.

As part of this application process, we recommend that DEQ investigate the type of liability insurance that DMM carries for this operation. If none is provided, DMM must have a master liability policy that covers a hazardous chemical facility in a remote location.

Although the Rules do require specification of the legal structure for an applicant, the Rules do not provide any authority or criteria for DEQ to evaluate this legal structure. Nor do the Rules provide for evaluation, analyses, or authorities to require liability insurance of any operator to ensure against damages that may result from the release of chemicals or wastes to the environment.

Comment/Response 172.

Commenter: Dave Tomten, U.S. Environmental Protection Agency

General Comments and Recommendations

1. Our general assessment is that the draft permit addresses many of the key concerns typically associated with management of chemicals and process solutions at small mining and milling operations. The draft permit contains a clear and unambiguous set of conditions and expectations related to management of chemicals and process solutions. Because it is not a comprehensive reclamation plan for the site, however, we are not able to evaluate whether draft permit conditions will be protective of water resources or other media during all stages of the mining lifecycle. We believe the permit would be improved by providing a fact sheet that provides a clear linkage between environmental issues/concerns/risks, management objectives, and permit conditions.

Agreed. As part of the Final Permit package, DEQ provides a fact sheet that identify the most critical water quality related issues and how they are dealt with. However, this fact sheet accompanies the Final Permit; it does not precede it. The fact sheet, however, may be useful in other agencies' reviews of potential permitting requirements for the operator, such as a general sector storm water permit under the National Pollution Discharge and Elimination System (NPDES) as is discussed later in EPA's comments. DEQ urges EPA and DMM to follow through with the evaluation of these requirements.

Comment/Response 173.

Commenter: Dave Tomten, U.S. Environmental Protection Agency

2. Adequacy of Site Characterization. We found it difficult to frame the environmental risks at a meaningful level of detail because of a general lack of good site characterization information in DMM's application package. We believe good site characterization information is necessary to make good decisions on appropriate and protective permit conditions. There are several key topics that should be carefully evaluated in the permitting process, that were missing or weak in the application materials, including characterization of ore, waste rock, and tailings, characterization of the hydrologic setting, water balance modeling and water management. More specific guidance on each of these topics is provided in the Source Book.

DEQ agrees that the application does not comprehensively characterize the site. However, given the small scale of the operation, DEQ's focus has been on the engineering design and specifications of source control measures that place the water quality compliance points closer to the facilities, where problems can be more readily detected and mitigated. DEQ has also focused the proponent's efforts towards development of an emergency response plan, which we believe is considerably more comprehensive than that devised and implemented at most mines sites throughout the west. Furthermore, extensive characterization of the site and adjoining area, which has been heavily impacted by many different anthropogenic sources, including grazing, fires, motorcycles, etc., will make differentiation of sources and steady state conditions of surface and ground water extremely difficult, if not impossible, and is not one of the purposes of the Rules.

The Draft need not be modified to respond to this comment.

Comment/Response 174.

Commenter: Dave Tomten, U.S. Environmental Protection Agency

3. Transportation of Hazardous Materials and Concentrates. EPA strongly supports the draft permit conditions related to transportation and spill response planning. A recurring problem at mine sites in the Northwest is related to transportation incidents involving hazardous materials. Recent and recurring transportation incidents at other hard rock mines in Idaho emphasize the importance of planning for expected problems.

Thank you, DEQ agrees.

Comment/Response 175.

Commenter: Dave Tomten, U.S. Environmental Protection Agency

4. Re-Use of Waste Materials in Compost Manufacturing. EPA strongly recommends that DEQ require DMM to conduct a more robust characterization of waste materials after start-up. This will provide the information needed to help evaluate whether waste materials can be safely re-used for other applications. It will also help to verify assumptions made during permitting, provide information to further assess protectiveness of closure requirements.

DEQ agrees, and although DMM had proposed how it will improve its waste stream characterization during ongoing operations, DEQ has made numerous changes to monitoring requirements, such that the final composition of the tailings and other wastes that accumulate from ore processing and the ultimate decommissioning of the facilities is well understood. For instance, instead of just TCLP analyses of tailings and treated wastewater analyses, the collection and analyses of composite tailings samples and any leachate that enters the leak detection collection system will provide invaluable data about the longer term leachability of the tailings. The leak detection/collection system will be the point of long term monitoring for the wastes and will provide the most important data for final closure of this waste facility.

DEQ will require long term monitoring of the leak detection and collection system during operations and post-closure. This will determine the relative quality of any leachates that pose a risk to ground water and will help determine the effectiveness of final closure activities for the tailings impoundment. Furthermore, the permit will stipulate that DMM must collect and analyze wash water and solids from the decontamination and dismantling of the ore processing facilities in order to properly determine the appropriate disposal technique(s) for those wastes.

Comment/Response 176.

Commenter: Dave Tomten, U.S. Environmental Protection Agency

5. Financial Assurance. The draft permit does not include basis for the bond amount required. We recommend that the final permit describe the necessary tasks and estimated cost to reclaim and close the site in a manner that achieves reclamation goals and post-mining land use objectives. It should also disclose site management needs for

the post closure period, and associated capital and O&M costs. In particular the bond estimate should consider costs associated with management of contaminated seepage from waste rock dumps and tailings facility drain down solution and leakage during the post closure period, as these waste streams would be expected to persist for long periods of time. This type of information is necessary to inform the public and decision-makers of the financial risk to the public posed by conditions at the site. Although no basis is presented in the draft permit, our experience with mine cleanup projects suggests that the proposed bond amount of $25,000 would be inadequate to complete necessary reclamation tasks if the operator were unable or unwilling to do so.

The requirement of a $25,000 bond is specifically tied to ensuring neutralization of process wastes and waste water if the facilities are abandoned. DEQ's authorities do not extend to requirements of personal and property liability or catastrophic environmental liability insurance.

By Rule, DEQ can not change its requirement of a $25,000 bond.

Comment/Response 177.

Commenter: Dave Tomten, U.S. Environmental Protection Agency

6. Contingency Planning. The permit should require that the proponent develop a strategy for responding to reasonably foreseeable, yet unintended, circumstances at the site. The strategy should include "trigger levels" (e.g., exceedences of ecological benchmarks) or observations (e.g., statistically significant trends in indicators, dump stability indicators, permit violations, water balance problems, changes in discharge or chemistry of springs/seeps) that would set in motion a follow-up action. This strategy or contingency plan should be developed prior to issuance of a final permit so that oversight agencies and the public may comment on its adequacy. This type of plan when coupled with the monitoring program is necessary to mitigate for uncertainties and risks associated with predictions of environmental outcomes, and will provide an early warning system of unexpected outcomes. Such plans are necessary to ensure that post-mining land use objectives can be achieved and sustained in the future, and to avoid the types of problems that have occurred at other mine sites in central Idaho.

Although proposed operation is modest in scale compared to some mining operations, the type of operation, the volume and toxicity of wastes involved, and its location, all suggest that careful analysis and mitigation of concerns is warranted. We suggest that good mitigation planning cannot be made without better and more complete information in the application package, and then providing a clear linkage and rationale between issues/concerns and the proposed permit conditions. The permit should also include a clear basis for the bond amount requested. We believe these types of information are necessary for the public to make informed comments, and for the decision-maker to be fully informed of the environmental and financial risks to the public associated with this type of project.

Agreed. DEQ has reevaluated the monitoring purposes and objectives of the operations and has provided indicators and contingency plans that are triggered in response to unauthorized discharges. During the public comment period it became apparent, that these indicators and contingencies were not sufficient. In response, DMM has redesigned primary and secondary

containment systems and the leak detection and collection system, considerably downsized the level of operations, and made major changes in the storm water management and emergency response plans.

These changes will be reflected as requirements in the Final Permit.

Comment/Response 178.

Commenter: Dave Tomten, U.S. Environmental Protection Agency

Detailed Comments

Section VI.A.7: Please note that EPA does not approve or permit laboratory operations at facilities such as this. We advise that you consult with the State's laboratory certification officer and revise this requirement accordingly.

Noted.

Comment/Response 179.

Commenter: Dave Tomten, U.S. Environmental Protection Agency

Section VI.B.10: EPA recommends that you also require a total metals analyses of waste materials periodically. This is necessary to evaluate variability of waste materials, and will help to inform decisions on surface water and ground water monitoring in the affected area. This is also essential information needed to evaluate whether it is appropriate to use waste materials as soil amendments.

Agreed. The permit will stipulate that total metals analyses will be conducted on tailings and treated process wastewater on at least one cycle out of every ten during operations.

Comment/Response 180.

Commenter: Dave Tomten, U.S. Environmental Protection Agency

Section VI.C.4: If the facility meets the threshold criteria for petroleum storage in the SPCC regulations, then the facility must comply with all SPCC regulations, including planning and secondary containment.

Agreed. However, this requirement is not authorized under the state's Rules. EPA and DMM must coordinate the administrative process and implementation to comply with SPCC regulations.

Comment/Response 181.

Commenter: Dave Tomten, U.S. Environmental Protection Agency

Section VII: Please note that discharges of pollutants from the facility to waters of the US are prohibited by the Clean Water Act unless specifically authorized by an NPDES permit. These requirements apply to process water, and storm water that may be discharged from such a facility. Thus, if there is a reasonable potential for process water to discharge from the facility to waters of the US, then the facility must apply for an individual NPDES permit from EPA. If there is a reasonable potential to discharge

storm water from the facility during the construction or operational phases, then the facility must seek authorization to discharge from EPA by complying with terms and conditions of the storm water general permit prior to construction or operation.

Again, EPA has pointed out what the operator may need to do to comply with EPA regulations. However, the Rules do not provide DEQ with authorities to stipulate that an operator must comply with EPA's regulations. DEQ does agree that provisions for storm water runoff is necessary to protect surface and groundwater quality, and has, therefore, provided for this in the final cyanidation permit requirements. DEQ urges EPA and DMM to follow through with the evaluation of any appropriate requirements according to EPA's NPDES program..

Comment/Response 182.

Commenter: Dave Tomten, U.S. Environmental Protection Agency

Section VIII: EPA recommends that the permit include a requirement that the operator develop a site-specific quality assurance sampling plan for all monitoring activities. This will help to ensure that sampling activities yield information of adequate quality and quantity to meet stated objectives. This is a standard practice recommended by EPA and consensus-based organizations such as ASTM for environmental data collection activities. EPA is available to provide assistance in this regard.

Agreed.

The Final Permit will include site-specific quality assurance (QA) requirements for all monitoring activities. The purpose and objectives for QA will include validating data that demonstrate process wastes have been effectively treated prior to discharge, validating BMPs and closure activities for effectiveness, and validating that unauthorized discharges, if any, do not adversely impact surface and ground water.

Comment/Response 183.

Commenter: Dave Tomten, U.S. Environmental Protection Agency

Section VIII.E: EPA is not able to evaluate the adequacy of the list of analytes without reviewing ore characterization information. For example, it may be appropriate to include additional analytes such as lead, zinc, and selenium depending on the composition of the ore and waste rock stored on-site.

DEQ was able to formulate the list of analytes to be used as indicators based on the information provided, particularly the ore and waste rock characterization information. Unless these indicators show up in samples in significant concentrations, other trace elements aren't critical to evaluating impacts.

Comment/Response 184.

Commenter: Dave Tomten, U.S. Environmental Protection Agency

Section VIII.M: The wording of this section implies that only some of the State's water quality criteria apply to this site. Suggest rewording to clarify that all State water

quality criteria apply. EPA also wants to emphasize that any discharge of pollutants from the facility to waters of the US are prohibited, unless specifically authorized by an NPDES permit.

Agreed.

This section will be modified to explicitly state that all criteria are subject to analysis, if they are suspected to be present in the system as a result of unauthorized discharges. It will also be modified to indicate that DMM is responsible for complying with all of the state's surface and ground water quality criteria, as applicable.

Comment/Response 185.

Commenter: Dave Tomten, U.S. Environmental Protection Agency

Section IX.J: Please note that nothing in this permit relieves the operator of requirements to notify and report to EPA when spills or releases meet threshold criteria.

Section II D specifically states that nothing in this permit relieves DMM of its responsibilities or requirements as specified by any other federal, state or local laws, rules standards or ordinances.

Comment/Response 186.

Commenter: Dave Tomten, U.S. Environmental Protection Agency

Section XIII, Financial Assurance: EPA is particularly concerned about the amount of the proposed bond in the draft permit. Although there is no basis for the bond amount included the permit, in our opinion, the amount of the bond greatly underestimates the cost it would take a third party to implement closure tasks is not adequate to meet the purpose stated in Section XIII.A to "...ensure the performance of those required closure activities prescribed in the Permanent Closure Plan...." If the facility operator is unwilling or unable to implement the temporary or permanent closure plan, then the proposed bond would not be adequate to cover necessary reclamation tasks to protect human health or the environment.

The requirement of a $25,000 bond is specifically tied to ensuring neutralization of process wastes and waste water if the facilities are abandoned. DEQ's authorities do not extend to requirements of personal and property liability or catastrophic environmental liability insurance.

By Rule, DEQ cannot change its requirement of a $25,000 bond.

Comment/Response 187.

Commenter: The Evans Company, Boise

I appreciated your management of the January 20 meeting relative to the Blacks Creek cyanide *I* gold extraction operation.

After personally pondering the small but still intrusive nature of this industrial concern being located in the Danskins area, I am convinced the risks outweigh the benefits to the citizenry.

I was particularly moved by the concerns of the local ranchers as to the risk of petroleum, cyanide and other potential spills to their precious water supply. My years in the chemical industry as both an employee of large companies *and* my own small companies (e.g. Olympic Chemical Corp., Tacoma and Los Angeles) proved to me that despite the best equipment and process technology, spills will occur. A municipal/ industrial environment can usually cope and learn from the experience. To locate a hazardous chemical plant in the middle of ranching and recreational, and sensitive aquifer environs is asking for Murphy's Law to be tested.

One item that was not discussed at the DEQ meeting was INSURANCE. In today's world, post the Bhopal, India Union Carbide disaster, most chemical companies find it impossible or cost prohibitive to obtain liability insurance, and so by necessity are 'self insured'. I can almost guarantee you that the Centennial operation will not have liability insurance. Their ability to pay damages in case of an environmental episode, most likely would depend upon the ownership's ability and or willingness to pay damages. With small operations with limited funding, closing shop and filing for bankruptcy is often the obvious recourse. I realize I am making an assumption relative to Centennials insurance coverage, but it is a question that should be asked. Since they own a number of companies, they probably have a master liability policy, but I would be surprised if such a policy would cover a hazardous chemical facility.

In closing let me say that I am not anti-industry. I made a living for many years in the chemical industry. I do however feel chemical manufacturing is best conducted in an industrial area where response to fire, spills, air pollutant controls, medical emergency quick response is readily available. In an area such as Blacks Creek, a lot of mistakes can go undetected until the damage is irreparable.

If I can be of any assistance to you in helping to clarify some of my personal concerns about the Blacks Creek project, please feel free to call on me.

By Rule, DEQ is not authorized to require insurance of facilities for response and cleanups of catastrophic failures or discharges. DEQ retains the authorities to seek cost recovery and ensure appropriate responses to those failures or discharges, but those activities are handled on a need-to-respond basis only.

Comment/Response 188.

Commenter: Ric Holmes, Atlanta, Idaho

The following questions/comments are submitted in accordance with your guidance that all questions and comments must be submitted in writing.

1 Q — What is DMM's plan to respond to the threat of wildfires?

What precautions will be taken on site to protect dangerous chemicals from fire?

Will whoever responds have the proper protection and be properly trained to deal with deadly chemicals and gases?

Or will DMM rely on the local "volunteer fire department" and will they be fully aware of the risks involved with responding to a fire where lethal chemicals are present?

Note: Hydrogen Cyanide Gas (HCN) is the most lethal of the forms encountered in a mining operation *(It is extremely deadly even in minute concentrations).* It is also HIGHLY flammable — requiring self-contained breathing devices and special protective clothing just to enter this poisonous atmosphere.

DMM will not be required to fulfill obligations for wildfire suppression for wildfires that do not threaten its facilities.

The Final Permit will, however, contain provisions for fire suppression of wild or site fires that may threaten the ore processing, fuel and chemical storage, and tailings impoundment facilities, and, hence, surface and ground water quality. DMM must ensure that its personnel are properly trained to 1) initiate an emergency notification process, and 2) provide fire suppression.

Comment/Response 189.

Commenter: Ric Holmes, Atlanta, Idaho

2 - Q — What protection will be afforded to those persons and animals that would be downwind or in the area of a chemical fire? Will there be a warning system and if so, how will it be tested, monitored, and implemented to ensure safety of everyone that could be affected?

The Rules do not provide for this analysis. However DEQ has considered how and why fire suppression is critical towards protection of surface and ground water quality. It has, therefore, required plans for fire suppression.

Comment/Response 190.

Commenter: Ric Holmes, Atlanta, Idaho

3 - Q — Will DMM have sufficient respiratory equipment on site to protect its workers or vendors from the dangers of chemical fire?

Note: Cyanide in dry form (and in solution form) begins producing hydrogen cyanide gas in very large quantities at temperatures above 130 degrees F.

The Rules do not provide authorities to require this, but the facility is also governed by the Occupational Safety and Health Act, which does.

Comment/Response 191.

Commenter: Ric Holmes, Atlanta, Idaho

4 - Q — In view of the above, what method will be used to ensure that both stored and used chemicals will not be exposed to 130 degrees or more? (inside temperatures of steel storage sheds in the desert summer heat can easily reach 130+)

This point is one that has not been addressed, but DEQ does not understand how it might relate to the protection of surface or ground water quality.

Comment/Response 192.

Commenter: Ric Holmes, Atlanta, Idaho

5 - Q — In a public meeting held 20 January, 2005 at DEQ, Boise, a spokesman for DMM stated they have no fire response plan and had not "considered" what to do. Will a definitive plan be required, and if so, which agencies will respond, and most important, where is the water going to come from to fight a fire?

DMM will not be required to fulfill obligations for wildfire suppression for wildfires that do not threaten its facilities.

The Final Permit will, however, contain provisions for fire suppression of wild or site fires that may threaten the ore processing, fuel and chemical storage, and tailings impoundment facilities, and hence surface and ground water quality. DMM must ensure that its personnel are properly trained to 1) initiate and emergency notification process, and 2) provide fire suppression.

Comment/Response 193.

Commenter: Ric Holmes, Atlanta, Idaho

6 - Q — Liners leak, as conceded by Rick Frechette, the engineer working with/for DMM. Who determines what amount of leakage is acceptable? (Please define acceptable/minimal leakage).

The Draft Permit provided requirements for a leak detection and collection system because liners of facilities, where a head pressure results from long term storage of liquids, do frequently leak small volumes. However, monitoring and operating a leak detection collection system underlying the tailings impoundment should prevent a head pressure from developing in the leak detection and collection system, and, therefore, this secondary containment system should not leak to the underlying soils and ground water.

Comment/Response 194.

Commenter: Ric Holmes, Atlanta, Idaho

7 - Q — How many "ponds" will be used to store waste? Will they all be monitored for leakage?

Only one tailings impoundment will be constructed, and, yes, it will be monitored, per the previous comment.

Comment/Response 195.

Commenter: Ric Holmes, Atlanta, Idaho

8 - Q — What back up systems will be in place in the event of natural disasters to prevent chemical leakage, spillage, or other chemical contamination?

Please see previous comments regarding contingency plans.

Comment/Response 196.

Commenter: Ric Holmes, Atlanta, Idaho

9 - Q — Who accepts the monitory damages to local water supplies, persons, wildlife, and fauna due to spills of any kind and, how is that amount determined?

Damages to these beneficial uses are not acceptable. By law, the state may pursue damages and cost recovery for damages from an operator in this event.

Comment/Response 197.

Commenter: Ric Holmes, Atlanta, Idaho

10 - Q — How much water will be available for employees of DMM to comply with safety standards required after handling dry cyanide? *(extensive washing of one 's self and all equ1~oment is mandatory and all that water must be neutralized)* Where is all that water going to come from? And what system will be in place to contain/treat that contaminated water?

Employee safety is beyond the scope of DEQ's authorities.

Comment/Response 198.

Commenter: Ric Holmes, Atlanta, Idaho

11 - Q — How will chemical containers (ie: cyanide) be disposed of?

The Final Permit will require that chemical containers should be either returned to suppliers for reuse or decontaminated, according to original contents, and disposed in a solid waste landfill. The rinsate from the decontamination process may, depending on the original product, be recycled in the milling process. Containers of petrochemicals must be removed from the site. At no time may fuel, oil and air filters, chemical containers, contaminated buckets, and solid or liquid wastes be buried, burned, or otherwise disposed at the site.

Comment/Response 199.

Commenter: Ric Holmes, Atlanta, Idaho

12 - Q — Who responds to chemical spills (of any type) and who covers the costs? Idaho taxpayers or DMM?

Initially, the operators or their suppliers should provide for response to chemical spills or unauthorized releases in transit to or at the site, and, therefore, are responsible for the associated costs. However, DEQ has a responsibility to oversee containment and cleanup of spills or unauthorized discharges and has cost recovery authorities for doing so. If DEQ plans and implements a containment and cleanup for a spill or unauthorized release, it will seek cost recovery from the operator or supplier who was responsible for proper transportation use handling and disposal.

Comment/Response 200.

Commenter: Ric Holmes, Atlanta, Idaho

13 - Q — What are the specific benefits of DMM to the people of the State of Idaho?

This question goes beyond the scope or intent of the Rules.

Comment/Response 201.

Commenter: Ric Holmes, Atlanta, Idaho

14 - Q — What are the long range plans of DMM, since they mentioned "phases" at the public hearing on the 20th? How many phases? What are the 'long range' plans that we do not know about yet?

This comment goes beyond the scope of this permitting process.

Comment/Response 202.

Commenter: Ric Holmes, Atlanta, Idaho

15 - Q — What is the track record of the company (DMM) and what assurances (other than a $25,000 bond) can be provided to the people of Idaho that DMM will comply with all laws, regulations, and good business practices?

This question goes beyond the scope or intent of the Rules.

Comment/Response 203.

Commenter: Ric Holmes, Atlanta, Idaho

16 - Q — What is the history of the equipment that will be used by DMM?

This question goes beyond the scope or intent of the Rules.

Comment/Response 204.

Commenter: Ric Holmes, Atlanta, Idaho

17 -Q — Who, besides the designer, knows enough about the equipment that will be used to do adequate inspections to ensure compliance with Idaho laws?

The Idaho Department of Environmental Quality.

Comment/Response 205.

Commenter: Ric Holmes, Atlanta, Idaho

18- Q — When will the public have the opportunity to get answers to all of the questions that have been asked?

In responding to written comments, DEQ will compile a comprehensive document that will be available at DEQ for public review. Copies of this document may be obtained through a public information request or viewed on-line. Although complimentary copies of the

document will be distributed to some stakeholders, such as the Desert Mineral Mining, local ranchers, the City of Boise, the Idaho Department of Lands, and Elmore County Commissioners, it will not be distributed to everyone. However, a brief of the major public comments and DEQ's responses will be broadly distributed to everyone who provided detailed comments, such as those found in Section One.

Comment/Response 206.

Commenter: Ric Holmes, Atlanta, Idaho

19 -Q — Should Idaho DEQ grant permission for DMM to mine, will all records of all transactions with DMM be available to the public?

All information and material that DEQ has on file is available to the public through Public Information Requests.

Comment/Response 207.

Commenter: Ric Holmes, Atlanta, Idaho

20- Q — How many Idahoans will be employed by DMM?

This is beyond the scope of DEQ's review.

Comment/Response 208.

Commenter: Ric Holmes, Atlanta, Idaho

21 - Q — What type of physical security will be employed to ensure dangerous chemicals are not stolen?

The Final Permit will require on-site security, with trained emergency response personnel 24 hours per day, 7 days a week, from the beginning of operations through final closure.

Comment/Response 209.

Commenter: Ric Holmes, Atlanta, Idaho

22 - Q — Will DMM rely on an 'occasional drive by' from the Elmore County Sheriff, or will there be a person on site 24 hours a day, 7 days a week (or hours that D~ is not working) that will be tasked with physical security.

Note: If DMM plans to rely on a fence and a padlock, Idahoan's should have grave concerns regarding the safeguard of dangerous chemicals.

See previous comment.

Comment/Response 210.

Commenter: Ric Holmes, Atlanta, Idaho

23 - Q — What type of communication system/s will be in place in the event of an emergency?

The Final Permit will require that a satellite phone is operable on site 24 hours a day.

Comment/Response 211.

Commenter: Ric Holmes, Atlanta, Idaho

24 - Q — Who has done a risk assessment that can attest to the potential threats of having dangerous chemicals left unguarded should there not be a person on duty charged with security.

Thank you for your attention to these issues. These are a few of the many concerns that I hope will be addressed with this and any other mining operation in view of our post 911 world. Times have changed. The way of doing business should change as well.

An unmanned site is not an issue for this project.

Comment/Response 212.

Commenter: Jim Nutt, Boise

LINE ITEM COMMENTS:

II. Permit Authorization

C. #3, "the facility no longer qualifies as a small mineral processing facility"

Comment: If there is a potential for this facility to grow into a large facility this should be disclosed now and its associated effects displayed.

#6, Comment: If this permit is revoked or modified this should be made available for public review.

The Rules provide very specific processes for modifications of permits, including public review.

Comment/Response 213.

Commenter: Jim Nutt, Boise

III. General Site Information

A — D: I noticed that all aspects and principal ownership of this proposal do not reside in Idaho, only a "Registered Agent" resides in Idaho. Thus they do not have to live with the toxic dump the plan to leave behind, or see the scar left upon the landscape. While the citizens of Idaho are left with this to deal with the after effects for generations to come.

This comment is beyond the scope of the Rules.

Comment/Response 214.

Commenter: Jim Nutt, Boise

IV. Site Location and Topographic Maps.

Comment: This information was not available for viewing, from the Internet site (http://wwwdeq.idaho.gov/public/comment.cfhi). Also, no Figures referred to throughout the documents were available for viewing from the above Internet site.

The documents that were provided on the Internet were presented as complimentary to the public. The application package and Draft Permit are only required, by the Rules, to be available at DEQ's office and upon request through the Public Information Request process.

Comment/Response 215.

Commenter: Jim Nutt, Boise

VI. Operation Plan

A. #2. There isn't any effects analysis displaying the cause and effect relationship for operating a vibrating mill and diesel generators *(65* kilowatt with a 35 kilowatt back-up). What effect will these activities have on the local and migratory terrestrial wildlife, and avian wildlife? How will this constant noise affect the adjacent landowners, and the recreational users of the area? What will this do the adjacent property values?

Presentation of risk analyses are not required by Rule.

Comment/Response 216.

Commenter: Jim Nutt, Boise

A. #3. Trailers shall and temporary housing. Disclose how will gray water and wastewater be dealt with? What effects will these activities have on water quality if a leak occurs? What is the porosity rate of the soil? How quickly can these contaminate reach groundwater or running water based upon the soil porosity rates? If a leak occurs how quick will these contaminates reach this potential water source?

Disposal of domestic wastewater is beyond the scope of the Rules. This issue falls under the authorities of the county and district health agencies.

Please refer to Section 3, - Overview surface & Subsurface Conditions; - Ground Water Characteristics in Mineral Processing Facility Location; 3.d First Paragraph: "Drill hole water levels from *35* exploration logs surveys showed water level depth a 11-98 ft throughout the general area." 3.d. Last Paragraph . "Groundwater was encountered during the earlier site investigation in all borings located in the alluvial materials in the valley floor below the DMM site, at depths ranging from 7 — 11 feet below the existing ground."

Comment/Response 217.

Commenter: Jim Nutt, Boise

B. #1. Concisely disclose what happens to the soil and spent ore after it is processed.

The spent ore and wastewater will be neutralized and released to the tailings impoundment, and once there it will be decanted through recycling and evaporation. At closure it will be covered with top soil and re-vegetated.

Comment/Response 218.

Commenter: Jim Nutt, Boise

B. #3. When the 36,500 tons capacity impoundment has been fully utilized an analysis should be conducted to fully disclose the effects of this to the local and migratory terrestrial wildlife, and avian wildlife? How will this impoundment affect the adjacent landowners, and the recreational users of the area? What will this do the adjacent property values?

An analysis has been conducted for the risk posed by the proposal,. However, additional data will be collected during operations to ensure that closure plans are protective of surface and ground water.

Comment/Response 219.

Commenter: Jim Nutt, Boise

B. #7. Define excessive winds, what plans are in place to complete this work during these periods.

A reference to "excessive winds" does not appear in this section.

Comment/Response 220.

Commenter: Jim Nutt, Boise

B. #8. What is the recourse if within 30 days a "As-Built Plans and Specification" documentation is not completed?

It is a violation of the Final Permit and Rule.

Comment/Response 221.

Commenter: Jim Nutt, Boise

C. #1. An action plan for the transportation of these chemicals on the county road, along Blacks Creek, should be made available for public review.

A transportation plan, which was proposed, has been modified and presented in the Draft Permit.

Comment/Response 222.

Commenter: Jim Nutt, Boise

VII. Water Management Plan

A Maximum anticipated water use.

25 gallons per minute (gpm)

1,500 gallons per hour (gph)

36,000 gallons per day (gpd)(24 hours)

13,140,000 gallons per year (gpy)

Prior to the removal of the 13, 140,000 gallons of water per year an environmental analysis should be conducted to fully disclose how this action affects the local and migratory terrestrial wildlife, fisheries, and avian wildlife? How will this water withdrawal affect the adjacent landowners, and the recreational users of the area? What will this do the adjacent property values?

What is the priority date for the water right? Where is this amount of water coming from? Deep wells, diverted water, stored runoff? How will this removal of water affect the local flora and fauna in a water limited area?

This is beyond the scope of DEQ's review.

Comment/Response 223.

Commenter: Jim Nutt, Boise

B. #1. What measure(s) will be taken to reduce the potential or realized runoff! erosion during pulse water events.

B. #2. Specifically describe which Best Management Practice (s) will be used. What rational was used to determine the above BMP(s) to be an effective protective measure.

These issues were addressed in the Draft Permit.

Comment/Response 224.

Commenter: Jim Nutt, Boise

VIII. Surface *I* Ground Water Quality Monitoring

B. No Figures referred to throughout the documents were available for viewing from the following Internet site (http ://wwwdeq.idaho.gov/public/comment.cfln).

The documents that were provided on the Internet were presented as complimentary to the public. The application package and Draft Permit are only required, by the Rules, to be available at DEQ's office and upon request through the Public Information Request process.

Comment/Response 225.

Commenter: Jim Nutt, Boise

C. The minimum surface water samples described in this section are insufficient to rapidly detect and react to any environmental problems caused by the operation of the proposed mining and milling. At minimum weekly samples should be taken and analyzed by an independent laboratory.

As partially stated previously, DEQ believes that the most effective means of protecting surface and ground water is for DMM to focus their resources in source control measures and redundant backup systems, such as the leak detection collection system. In some instances, such as on Three Points Mountain, monitoring wells and surface water sampling points only indicate that a discharge has occurred and is impacting areas far from a source. It is more logical to expect that leaks or discharges that are discovered close to the source can more easily be contained and cleaned up. Generally speaking, this strategy reflects that the further you get away from a source, the more widespread a contaminant plume may become, and the number of receptors increases exponentially. Therefore:

The Final Permit will require treatment and analyses of process wastes and waste water before discharge to the tailings impoundment, and that impoundment will have a leak detection collection system.

Comment/Response 226.

Commenter: Jim Nutt, Boise

D. Fully disclose what the "standardized methods" are, and disclose their effectiveness.

There are many articles and books that address this comment. DEQ suggests that the local library is a good source for finding and reading articles on standards and practices for water quality sampling and analyses.

Comment/Response 227.

Commenter: Jim Nutt, Boise

P. ……the Department may require an increase .... Change the word "may" to "SHALL".

The permit language is correct as it is.

Comment/Response 228.

Commenter: Jim Nutt, Boise

IX. Transportation and Spill Response Plan

A. This plan should be made available for public review and made available to the Elmore and Ada County, Idaho transportation departments, for comments and approval.

It has been.

Comment/Response 229.

Commenter: Jim Nutt, Boise

C. DMM must ensure .... Change "must" to "SHALL".

The permit language is correct as it is.

Comment/Response 230.

Commenter: Jim Nutt, Boise

H. #1-4. Spill containment plan shall include a Contact List that includes:

USD1 Fish and Wildlife Service (USF&WS)

Idaho Department of Environmental Quality (DEQ)

Environmental Protection Agency (EPA)

USDA Forest Service (USFS)

Bureau of Land Management (BLM)

Local downstream private and municipal water users

The Emergency Response Plan is being modified to provide for notification of those agencies responsible for initial response and local residents whose health and safety may be placed in imminent threat.

Comment/Response 231.

Commenter: Jim Nutt, Boise

J. #4. C. ii. When a spill occurs a separate party other than DMM, such as DEQ or EPA, shall conduct the investigation.

The permit language is correct as it is.

Comment/Response 232.

Commenter: Jim Nutt, Boise

J. #4. C. v. Measure shall also be taken to protect the natural resources surrounding the spill site.

The permit language is correct as it is.

Comment/Response 233.

Commenter: Jim Nutt, Boise

X. Access and Security

B 2. "The impoundment shall be fenced to restrict access by wildlife." Fully disclose the cause and effect relationship if this fenced impoundment is breached, what will happen to the terrestrial wildlife. Terrestrial wildlife includes mammals, reptiles, and amphibians and all species should be considered in the analysis. The impoundment should also protect / restrict access from all forms of avian wildlife at all times (year round).

Presentation of risk analyses is not required by Rule.

Comment/Response 234.

Commenter: Jim Nutt, Boise

XI. Seasonal and Temporary Closure Strategy

B #4.d & e. What happens to the "wash water"?

Wash water must be appropriately characterized and neutralized prior to release to the tailings impoundment.

Comment/Response 235.

Commenter: Jim Nutt, Boise

B #4. f. Is this synthetic cover adequate to protect avian wildlife from the entire impoundment (100%)? If yes, then disclose this; if not, why not.

Presentation of risk analyses is not required by Rule.

Comment/Response 236.

Commenter: Jim Nutt, Boise

XII. Permanent Closure

B. #3 Prior to the toxic residual soil/ spent ore being sealed and covered in a "repository" an analysis should be conducted to fully disclose the effects of this to the local and migratory terrestrial wildlife, and avian wildlife? How will this buried toxic "repository" affect the adjacent landowners, and the recreational users of the area? What will this do the adjacent property values?

Presentation of risk analyses is not required by Rule.

Comment/Response 237.

Commenter: Jim Nutt, Boise

How long (years) will this HDPE liner last. Fully disclose what the potential effects are if the liner leaks toxins, to mammals, reptiles, amphibians, fisheries, water quality (ground water and surface waters), botanical resources, avian life forms, soil productivity and human beings.

Depending on a liner's installation and its exposure to natural phenomena, such as ultra violet radiation, liners may provide impermeable barriers for up to 100 years. However, this far exceeds that engineering purpose of this system. Presentation of risk analyses is not required by Rule.

Comment/Response 238.

Commenter: Jim Nutt, Boise

If this liner leaks or is broken and has the potential to affect water resources, what is the soil porosity rate and distance to groundwater? And at this rate how soon will it degrade water quality?

Presentation of risk analyses is not required by Rule.

Comment/Response 239.

Commenter: Jim Nutt, Boise

If the residual / spent ore is not toxic why seal it into a PDPE liner? This toxic residual / spent ore should be double lined. Better yet, do not permit this project and none of this would be needed.

The liner system for the tailings impoundment and its leak detection collection systems are redundant systems that DEQ has required in case DMM personnel fail to complete the neutralization of spent ore or process waste water before release to the impoundment or if an emergency situation arises such that contaminated wastewater, soils, or runoff needs to be temporarily stored in the impoundment pending proper treatment and disposal.

Comment/Response 240.

Commenter: Jim Nutt, Boise

B. #5 Any seed mix or planting should consist solely of native vegetation or seeds.

Appropriate seed mixes have been prescribed by the Idaho Department of Fish and Game; subsequently, both IDL and DEQ have made that prescription permit requirements.

Commenter: Jim Nutt, Boise

D. Why do we want to permit the dumping of spent concrete? This is only adding injury to insult to our local environment, where we live.

This comment is beyond the scope of the Rules.

Comment/Response 241.

Commenter: Jim Nutt, Boise

F. #3 Specifically describe which Best Management Practice (s) will be used. What rational was used to determine the above BMP(s) to be an effective protective measure.

BMPs are discussed in the Application Package and Draft Permit's Storm Water Management Plan.

Comment/Response 242.

F. #7 There should be no question who will retain ownership of this destroyed area, it should be

DMM. DMM should also be required to have an adequate bond to cover all costs of long term

(100 years) reclamation. This bond might be as high as ten million dollars ($10,000,000).

Commenter: Jim Nutt, Boise

XIII. Financial Assurance

B. Fully disclose what can be accomplished with $25,000. This sum of money is wholly inadequate to fully cover costs for reclamation. DMM should also be required to have an adequate bond to cover all costs of long term (100 years) reclamation. This bond might be as high as ten million dollars ($10,000,000).

The requirement of a $25,000 bond is specifically tied to ensuring neutralization of process wastes and waste water if the facilities are abandoned. DEQ's authorities do not extend to requirements of personal and property liability or catastrophic environmental liability insurance.

By Rule, DEQ cannot change its requirement of a $25,000 bond.

Comment/Response 243.

Commenter: Jim Nutt, Boise

XVI. Permit Revocation

B revoke a permit, she shall issue... Change to "revoke a permit, the Director shall issue.. This statement should be a gender-neutral statement.

Section 2 — Overview of the proposed small mineral cyanidation processing facility.

2. a

Prior to permitting the proposed activity an environmental analysis should be conducted to fully disclose the effects of the "internal vibratory mill" and diesel generators *(65* kilowatt with a 35 kilowatt back-up) to the local and migratory terrestrial wildlife including mammals, reptiles, amphibians, fisheries, botanical resources, avian life forms, soil productivity and human beings.

Presentation of risk analyses is not required by Rule.

Comment/Response 244.

Commenter: Jim Nutt, Boise

How will this constant noise and vibrating affect the adjacent landowners, and the recreational users of the area? What will this do the adjacent property values?

Presentation of risk analyses is not required by Rule.

Comment/Response 245.

Commenter: Jim Nutt, Boise

2.b.2

If the facility is going to expand or there is a potential to expand this should be fully disclosed and analyzed.

Presentation of risk analyses is not required by Rule.

Comment/Response 246.

Commenter: Jim Nutt, Boise

2.c

Environmental impacts from fugitive dust from the proposed mining operations should be disclosed. What will be the effects from the fugitive dust be to the local and migratory terrestrial wildlife including mammals, reptiles, amphibians, fisheries, botanical resources, avian life forms, soil productivity and human beings.

How will this fugitive dust affect the adjacent landowners, and the recreational users of the area? What will this do the adjacent property values?

Presentation of risk analyses is not required by Rule.

Comment/Response 247.

Commenter: Jim Nutt, Boise

2.e

"; DMM will purchase water supply from current water right user." Has the current water user been notified? Is this use permitted under the existing water right? What is the water right number, and its priority date. What amount cubic feet per second (CFS) is this water right for? Generally, in a water limited environment is this how we want our water resources to be utilized?

Water rights analyses or arbitration is not within the scope of DEQ's authorities or rules.

Comment/Response 248.

Commenter: Jim Nutt, Boise

2.f.

What effect will operating two diesel generators (65 kilowatt with a 35 kilowatt back-up) have on the local and migratory terrestrial wildlife, and avian wildlife? How will this constant noise affect the adjacent landowners, and the recreational users of the area? What will this do the adjacent property values?

Presentation of risk analyses is not required by Rule.

Comment/Response 249.

Commenter: Jim Nutt, Boise

2.g

1320 gallons of diesel fuel poses a large catastrophic fire hazard, fully disclose the action plan for a catastrophic fire caused by this fuel.

DEQ is requiring fire suppression systems and procedures in the Emergency Response Plan as a means of ensuring surface and ground water quality protection.

Comment/Response 250.

Commenter: Jim Nutt, Boise

2.i

Fully disclose the cause and effect relationship if this fenced impoundment is breached, what will happen to the terrestrial wildlife. Terrestrial wildlife includes mammals, reptiles, and amphibians and all species should be considered in the analysis. The impoundment should also protect *I* restrict access from all forms of avian wildlife at all times (year round).

Presentation of risk analyses is not required by Rule.

Comment/Response 251.

Commenter: Jim Nutt, Boise

Section 3 — Overview of surface and subsurface condition description

3 .b Fully disclose to soil porosity rate of the soil within the action area and the rate at which a pollutants can be detected in nearby water source. What, in addition to the water, are the resource values associated with these water sources. What effect will the proposed activity affect these values?

Presentation of these analyses is not required by Rule.

Comment/Response 252.

Commenter: Jim Nutt, Boise

3.b. Paragraph 5

"No groundwater was encountered in any of the borings."

This statement conflicts with 3d. Paragraph 1; discussing water levels encountered throughout the general area. There is water throughout the general area and this project has the potential to negatively impact these natural resources. Fully analyze and disclose these potential effects.

Agreed. DEQ has evaluated this inaccuracy, but correction of the text in the Application Package is unnecessary.

Comment/Response 253.

Commenter: Jim Nutt, Boise

3.c. Paragraph 2

Data collected in 1989 is considered to be old (6 years), and not valid for decisions. Recollect the data and reanalyze the potential effects.

DEQ disagrees.

Comment/Response 254.

Commenter: Jim Nutt, Boise

3.c. Paragraph 7

If full-scale mining is the ultimate goal for this area, this should be disclosed and the potential effects analyzed.

Presentation of this analyses is not required by Rule.

Comment/Response 255.

Commenter: Jim Nutt, Boise

3 .d

Section 3, - Overview surface & Subsurface Conditions; - Ground Water Characteristics in Mineral Processing Facility Location; 3.d First Paragraph: "Drill hole water levels from 35 exploration logs surveys showed water level depth a 11-98 ft throughout the general area." 3.d. Last Paragraph. "Groundwater was encountered during the earlier site investigation in all borings located in the alluvial materials in the valley floor below the DMM site, at depths ranging from 7 — 11 feet below the existing ground."

This is very important information and should be considered into all aspects of the project.

DEQ agrees that the application does not accurately reveal all of the ground water wells and poorly describes ground water conditions and geochemistry within ten miles of the site. However, DEQ believes that the requirement of source controls, in the form of the leak detection/leak collection system, its monitoring, and its operating and maintenance procedures, sufficiently addresses the risks to surface and ground water quality.

The Draft Permit need not be modified to respond to this comment.

Comment/Response 256.

Commenter: Jim Nutt, Boise

Section 4 — Operating, reclamation, and water management plans for pilot scale test work

4.c Paragraph 4

Specifically describe which Best Management Practice (s) will be used. What rational was used to determine the above BMP(s) to be an effective protective measure.

Specific BMPs are contained and discussed in the Application Package and Draft Permit under the Section Storm Water management Plan. Presentation of risk analyses is not required by Rule.

Comment/Response 257.

Commenter: Jim Nutt, Boise

Section 8 — Financial Assurance

Fully disclose what can be accomplished with $25,000. This sum of money is wholly inadequate to fully cover costs for reclamation. DMM should also be required to have an adequate bond to cover all costs of long-term (100 years) reclamation. This bond might be as high as ten million dollars ($10,000,000).

The requirement of a $25,000 bond is specifically tied to ensuring neutralization of process wastes and waste water if the facilities are abandoned. DEQ's authorities do not extend to requirements of personal and property liability or catastrophic environmental liability insurance.

By Rule, DEQ cannot change its requirement of a $25,000 bond.

Comment/Response 258.

Commenter: Jim Nutt, Boise

GENERAL COMMENTS:

Given the past history of the DMM, as described in the local paper, a *$25,000* bond is wholly inadequate to fully cover costs for reclamation. DMM should also be required to have an adequate bond to cover all costs of long-term (100 years) reclamation. This bond might be as high as ten million dollars ($10,000,000). We, the taxpayers and citizens of Idaho should not be left "holding the bag" if DMM does not perform to standards.

The requirement of a $25,000 bond is specifically tied to ensuring neutralization of process wastes and waste water if the facilities are abandoned. DEQ's authorities do not extend to requirements of personal and property liability or catastrophic environmental liability insurance.

By Rule, DEQ cannot change its requirement of a $25,000 bond.

Comment/Response 259.

Commenter: William Potkovick

I have read the story on the gold mine. Since the property is on private land and on the water-shed of Boise River, it involves the Corp of Engineers whom are our overseers of watersheds, rivers and harbors of the U.S.

I assume that the leaching ponds will be on the watershed to the rivers and creek mentioned. This is a very dangerous situation having only heavy liners in these ponds. The heavy liner should be added to the pond only when a mixture of Bentonite and soil (1) ft. pad, compacted to a density 95 % to make the pond impermeable. This pad liner should be below the pad.

DEQ disagrees there are better alternatives to the referenced underliner. DEQ has prescribed a leak detection collection system instead.

Comment/Response 260.

Commenter: William Potkovick

There should be a leach field below the pond to catch percolating flow to test for toxicity, if any.

DEQ disagrees. Any residual effluent from the facilities must meet surface and ground water quality criteria and, therefore, may be returned to the watershed as natural runoff.

Comment/Response 261.

Commenter: John Weber

This is my public written comment regarding the Desert Mineral Mining Draft cyanidation Permit. I have many concerns about the permit and process. The January 20th public meeting seemed to favor the mining company much more than environmental quality. So much as to make me wonder who is putting pressure on the DEQ. I believe it is my state and federal tax dollars which fund the department. I believe it is my state and federal tax dollars which fund the department.

First off, the knowledge and ability to answer questions asked of the mining people was not adequate. It seemed that they were very un-prepared. Some of the people attending the meeting had much greater knowledge of mining than DMM. It seemed they were making things up along the way. This and the fact there is not a good mining track record for the company. The $25,000 for closing the tailing pond does not appear to be enough and I don't think it would be a good use of my tax dollars.

The requirement of a $25,000 bond is specifically tied to ensuring neutralization of process wastes and waste water if the facilities are abandoned. DEQ's authorities do not extend to requirements of personal and property liability or catastrophic environmental liability insurance.

By Rule, DEQ cannot change its requirement of a $25,000 bond.

Comment/Response 262.

Commenter: John Weber

Much of the data used in the draft was collected in 1989 and 1990. I believe current data should be required.

DEQ agrees that the application does not accurately reveal all of the ground water wells and poorly describes ground water conditions and geochemistry within ten miles of the site. However, DEQ believes that the requirement of source controls, in the form of the leak detection/leak collection system, its monitoring, and its operating and maintenance procedures, sufficiently addresses the risks to surface and ground water quality.

The Draft Permit need not be modified to respond to this comment.

Comment/Response 263.

Commenter: John Weber

I am concerned that the very thin (60 mil) liner will leak.

DEQ believes that the requirement of source controls, in the form of the leak detection/leak collection system, its monitoring, and its operating and maintenance procedures, sufficiently addresses the risks to surface and ground water quality.

The Draft Permit need not be modified to respond to this comment.

Comment/Response 264.

Commenter: John Weber

I am also concerned about how much water will be needed. This question was not answered. Dust suppression is important and takes a lot of water.

In final, it seems this draft was prepared in haste. I believe it should be denied at this time, at least until a more detailed and complete draft is issued. The company also needs to be more open. Many questions were not answered. The main one is how much gold do they think they will recover?

Water rights analyses and arbitration is beyond the scope of DEQ's authorities and Rules.

Comment/Response 265.

Commenter: Robin Sorenson

Your email of 1-6-2005 concerning the conditions under which a permit could be denied contains the sentence as follows: "However, if DEQ's Director is not convinced that risk management is sufficiently incorporated in a project plan or is not likely to be implemented by the permittee. DEQ should deny the permit." I would like to talk about this in connection with the application by Desert Mineral Mining LLC to operate an open pit mine with cyanidation processing facility on Blacks Creek Road.

Mr. Dan Terzo is the man in charge of this project. The first thing we see about him is that he lives in Laguna Beach, CA. There is nothing inherently wrong with that, but the salient point is that if he is there then obviously he cannot be here where the facility is.

1). The man in charge is absent.

Possibly, he can concentrate on the running of the facility even though absent. Unfortunately, the next thing we see is that his major business is acquisitions and mergers (ref. public meeting January 20). It would seem that he will not be able to give this his full attention.

2). The man in charge has many more demands on his time. This is not his full time job. Well, perhaps with his experience he doesn't need to give it his full attention, except…..he does not claim any mining experience.

3.). The man in charge is not experienced in this field.

In fact, there does not seem to be anyone in charge with an extensive knowledge of the complete project. Well, perhaps he has hired excellent people to do the work for him. He has hired RTR Resource Management, Inc. for environmental consulting.

Construction of the facilities, including primary and secondary containment in the tailings impoundment and mill building will be overseen by John Anderson, a registered Professional Geologist at Materials Testing and Inspection. Mr. Anderson's has over 30 years of inspection and testing experience for construction of facilities that will be designed and constructed at this site.

Operations of the facilities, training, and procedures for sampling wastes, along with some rudimentary tests will be conducted on site by qualified personnel hired by DMM. DMM identified Robert J. Hayek as the On-Site Operations Manager for the Mill. DMM has submitted Mr. Hayek's resume for DEQ's evaluation. It appears that Mr. Hayek has extensive experience in overseeing staff and collecting and analyzing water samples for geochemical and metallurgical analyses.

The Final Permit will stipulate that Mr. Anderson must provide quality assurance for construction of the facilities and sign off on those activities, and that trained personnel, under Mr. Hayek's supervision, will collect samples and submit them according to standardized protocols for water quality sampling and analysis.

Comment/Response 266.

Commenter: Robin Sorenson

The DEQ has received many comments from the public concerning the inaccuracies, omissions and vagueness in the RTR report. For example, they were wrong about the critical information concerning the location of drinking water wells in the area. A telephone call to The Department of Water Resources would have informed them. As another example they stated that no groundwater was present in any of the borings (page 8 of their report), while their logs in Appendix 4 show water at 10 ½ feet and 11 feet.

Maybe this report is not indicative of their work? At the public meeting on January 20, Mr. Richins was asked what neutralization agent they were going to use, as this was not clear in the report and draft permit. He replied that he tended to use the terms sodium hypochlorite and hydrogen peroxide interchangeably, as there was no difference between them. When asked if there was any difference in the byproducts, he said that there were none. Unfortunately for Mr. Richins, sodium hypochlorite contains chorine in one of its many forms, while hydrogen peroxide is composed of hydrogen and water. There are significant

differences in the effect of each neutralization agent on the cyanide solution (EPA and Hardrock Mining: A Source Book for Industry in the Northwest and Alaska).

When asked about the issue with the drinking water wells and the five mile limit, he told Mr. Demeyer in explanation that he used data from the 1989 report. I cannot imagine that any professional company would consider the fact that they used data fifteen years old as an acceptable reason for error, or even as an acceptable mode of operation. Even if it was correct in 1989 (it was not).

4). Their primary consulting firm is not operating to what I consider professional standards and has submitted inaccuracies in their report.

Sometimes the business succeeds even when management has problems solely because the people doing the physical work are there working and maintaining a high standard. The IDEQ and Idaho Department of Lands visited the site and discovered the Mr. Don Blow had pushed topsoil and vegetation down on the future bed of the tailings impoundment area in direct defiance of the rules governing the construction of the tailings impoundment area. Subsequent to this in December, the Department of Lands paid another visit to the site and actually issued a citation for non-compliance, as Mr. Blow had, among other things, caused a considerable mudslide. On January 10, a letter to Mr. Schuld and Mr. Wilson indicated that Mr. Blow would now be considered the official Project Manager. Desert Mineral Mining is apparently happy with his work.

5). The onsite manager perform incompetent and/or irresponsible work.

Perhaps the process itself is foolproof? While vat process cyanidation has been around for awhile, DMM is planning on using a vat process system, the Thompson Mill, which DMM says is somewhat different. However, there are none operating in this country and none in any other country that we can study for comparison and evaluation.

6.) While the process is known, the system is unknown.

Of course, the Idaho Department of Environmental Quality has experience with mining and with cyanidation processing facilities; they can write a permit that will cover most foreseen problems. Unfortunately for the public, IDEQ acknowledged at the January 20, 2005 meeting that they do not have the resources to enforce that permit.

7). The permit is not enforceable.

Given these risk factors, I would hesitate to trust Desert Mineral Mining with the health and livelihood of the surrounding families and businesses, or with the protection of the groundwater of this area. Desert Mineral Mining may have a good idea and good intentions, but I don't feel that they have demonstrated at this time that they are organized; committed; professional; and capable of and sincere about safety and about following the rules of the state of Idaho. The advantage to the state of Idaho resulting from the few possible jobs in the future is more than outweighed by the risk to the risk to the jobs and families already here. I request that you deny Desert Mineral Mining a permit at this time.

Although DMM and its consultants have made numerous errors in their evaluation of data and subsequent presentations at the public meetings, and DEQ does not have the resources to

monitor the ongoing activities and environmental conditions at the site, the State authorities do not identify these issues as reasons for DEQ to deny a permit application.

Comment/Response 267.

Commenter: Richard G. Rogers, Boise

I am writing to provide comments on the above referenced project and offer the following for your consideration.

This proposed facility is a small operation and reminds me of the Princess Blue Ribbon mining operation whose tailing pond failed catastrophically several years ago. Some of the engineering criteria for this project are similar to the Princess Blue Ribbon mining project as it lacks specifics and is very vague at best. The proposed compaction of the pond embankment of compacting the soil in 5 foot lifts with no specific type of compaction equipment specified (see page 3 of the DMM Fact Sheet date 1-20-05) is not adequate and is not acceptable. Acceptable lifts should be between 12 and 15 inches of clean material with no organic matter.

DEQ agrees with our previous assessment and your understanding of it. The recent practice of cutting and filling an area where the tailings facility is to be located is unacceptable.

DMM has completed geotechnical evaluations that provide acceptable engineering criteria for removing the sorting appropriate fill materials to remove organic matter (brush, stumps, logs, roots,), removing other deleterious materials and large particles greater than 6", such as rocks, and placing the modified fill in one foot (1') lifts and compacting each lift to a 95% proctor density until a level site is achieved.

Comment/Response 268.

Commenter: Richard G. Rogers, Boise

At the January 20th meeting it was alluded to the safety of cyanide mining operations in this state. I suggest that almost all of the previous projects had problems either during operation or during closure. All of the previous projects were located away from heavily populated metropolitan areas. With this proposed project so close to the city of Boise extra care is needed to protect the health and citizens of Boise, Ada County and Canyon County. The way I understand the cyanide rules the requirements are minimum requirements for the issuance of a permit however the Director can require more restrictive conditions in a permit if it is necessary to protect human health and public safety.

Agreed. As a result of numerous public comments and discussions with DMM, and considering the potential risks to local populations, the permit will contain considerably more stringent requirements than are being required for other "Small Mineral Processing Facilities" as allowed in the Rules.

Comment/Response 269.

Commenter: Richard G. Rogers, Boise

At the January 20th meeting I had hoped to hear some new and innovative ideas with respect to environmental protection and public safety but all I heard was old antiquated ideas. Mr. Richens stated that the goal of DMM is prevention with respect to protecting the environmental and everything he discussed was reactive in nature. For example he was always saying this is how we propose to respond to this event such as a diesel spill. I suggest that all fuel carrying trucks be equipped with a bladder and the transfer valve be internal thus if there is an accident all fuel will be contained in the trailer. With respect to chemicals being transported I propose they be transported in double wall containers.

Agreed. As a result of numerous public comments and discussions with DMM, and considering the potential risks to local populations, the permit will contain considerably more stringent requirements than are being required for other "Small Mineral Processing Facilities" as allowed in the Rules.

These requirements include the incorporation of preventative measures and redundant systems to guard against accidental or unauthorized releases of chemicals or wastes to surface or ground water. Preventative measures include transportation restrictions during inclement weather or road conditions. Redundant systems include fire suppression systems to protect the chemical storage, milling, and tailings impoundment facilities. Redundant systems also include requirements for treatment of process wastewater and spent ore prior to release to the tailings impoundment, which has a leak detection collection system in case treatment in the mill is ineffective, or in case accidental spill results in unauthorized discharges to the tailings impoundment.

Comment/Response 270.

Commenter: Richard G. Rogers, Boise

Just this week I reviewed a short article about the Summitville mine disaster in Colorado and how it killed off the Alamosa River. As you recall this was a limited liability company that went bankrupt and the owners walked away. What is to keep this from happening at this project? The ore as little value maybe 20 to 25 dollars per ton. If there is a major problem how is the LLC going to pay for any clean up? Mel Fisher spoke at the January 20th meeting and said his family would be the loser however he hasn't put up any financial securities that could be used for a clean up. As a property owner he should require a bond or furnish a bond that would cover a major clean up. I would suggest a 10 million dollar bond. This is something the director of DEQ could require as this is necessary for the protection of public health and safety.

Unfortunately, DEQ's authorities do not provide requirements for catastrophic environmental insurance, which is most likely the only answer to this concern.

The requirement of a $25,000 bond is specifically tied to ensuring neutralization of process wastes and waste water if the facilities are abandoned. DEQ's authorities do not extend to requirements of personal and property liability or catastrophic environmental liability insurance.

By Rule, DEQ cannot change its requirement of a $25,000 bond.

Comment/Response 271.

Commenter: Richard G. Rogers, Boise

At the meeting on January 20th Mr. Richens stated several times the cyanide levels would be reduced to 0.2 WAD and that would meet the drinking water standards. I believe the drinking water standards are based on total concentrations of pollutants in this case cyanide. The proposed drinking water standard from the 70's was 0.2 total CN.

The current numerical criteria for cyanide is expressed in terms of Weak Acid Dissociable (WAD)

Comment/Response 272.

Commenter: Richard G. Rogers, Boise

The engineered drawings on display at the January 20th meeting was not stamped by an Idaho professional engineer thus they are not the official drawings to be reviewed by the DEQ. So why wasn't the stamped drawings on display? Shouldn't the public have the opportunity to view the stamped drawings?

Agreed. This requirement has been applied to the revisions of the engineering designs and specifications resubmitted for DEQ approval of a downsized facility.

Comment/Response 273.

Commenter: Richard G. Rogers, Boise

The engineering drawings did not show the depth to ground water or bedrock at the proposed tailings pond structure. I have concerns that this facility will not have the minimum separation distance from the bottom of the structure and the top of the high ground water or bedrock. DEQ commonly use the design criteria found in the 10 states standards for wastewater and the depth to bedrock or groundwater is 10 feet. I believe you may find similar requirements for other storage facilities such as landfills.

DEQ agrees that the application neither reveals all of the ground water wells accurately nor adequately describes ground water conditions and geochemistry within ten miles of the site. However, DEQ believes that the requirement of source controls, in the form of the leak detection/leak collection system, its monitoring, and operating and maintenance plan sufficiently addresses the risks to surface and ground water quality.

The Draft need not be modified to respond to this comment.

Comment/Response 274.

Commenter: Richard G. Rogers, Boise

Most engineering analysis usually evaluates several sites for the location of a waste containment structure such as this tailings storage pond and they are evaluated with

respect to protecting the environment. Was this done and if so where were the other sites? Surely there are better sites that would pose little or no risk to the environment.

Alternatives analyses and comparison is not within the scope of DEQ's Rules.

In my opinion these sites are best located on relative flat ground and with at least 10 feet of soil above the high ground water or bedrock.

Noted.

Comment/Response 275.

Commenter: Richard G. Rogers, Boise

Page 3 of the Fact Sheet prepared by DMM dated January 2005 discusses the construction of the berm and calls for 5 foot lifts. This is not acceptable. Also no method of mechanically compacting the material is specified. A specification is needed for the material to be used for the berm.

Agreed. All placement and compaction of fill for foundations or berms for the tailings impoundment will be required to be placed on one (1) foot lifts and compacted to 95% procter.

Comment/Response 276.

Commenter: Richard G. Rogers, Boise

An Idaho licensed engineer has not stamped the drawings attached to the fact sheet.

Noted. Please see previous comments.

Comment/Response 277.

Commenter: Richard G. Rogers, Boise

The second drawing attached to the fact sheet does not show the depth of the impoundment nor does it show depth to ground water or bedrock. This depth is needed to either accept this site or reject it.

The revised engineering designs and specifications have responded to this deficiency.

Comment/Response 278.

Commenter: Richard G. Rogers, Boise

At the January 20th meeting it was stated the tailings structure would be located in 2 low areas. This implies the structure will be located in 2 natural drainage areas. This is not a good location as there will be surface runoff that will always be a threat to the storage facility even if it is rerouted and then there is the subterranean ground water flow that will continue to flow down gradient and under the storage facility thus creating a potential for this structure to slide or move down the hill when hydraulic conditions are right. Further more there will be the issue of ground water showing up down gradient of the storage facility or in the leak detection system and will compound

the problem of determining where the water is coming from and is the liner leaking. DEQ I believe has had to deal with this issue at other facilities and my suggestion is why not reject this site?

Although the location for the tailings impoundment spans a cut ridgeline and two fill zones in natural drainages, the location is close enough to the watershed divide as to minimize the amount of runoff that would be expected to flow naturally through the two drainage structures.

However, water management systems will be required, which are intended to channel the limited amount of precipitation that occurs above the tailings impoundment around that facility, through a series of BMPs, prior to being released far below the impoundment in the drainage.

Comment/Response 279.

Commenter: Richard G. Rogers, Boise

On page 3 of the DMM cyanide application dated November 12, 2004 at the top of the page it states the tailings facility will generally hold 10000 tons of tailings and a little ways down the page it is stated the design of the pond is for 36000 tons. Why the discrepancy?

DEQ cannot explain DMM's inconsistent representation in the text. However, DEQ evaluated the capacity of the tailings impoundment and determined it could contain approximately 36,500 tons of tailings, depending on water content.

Based on the revised engineering design and specifications, it is apparent that the tailings facility has a maximum capacity of approximately 22,000 tons, depending on water content. The Final Permit will stipulate approval of processing and disposal of approximately 22,000 tons of ore and waste.

Comment/Response 280.

Commenter: Richard G. Rogers, Boise

Page 3 of the application talks about construction of additional tailings storage ponds with no mention of preparing engineering documents as required by Idaho Code. Also there is not mention in the draft permit of how DEQ will require submittal of the required engineering documents.

DMM may not construct or operate expansions of the proposed facilities without applying for a modification of its permit. This process is essentially the same as the original permit application process, including a public review and comment period.

Comment/Response 281.

Commenter: Richard G. Rogers, Boise

Page 16 of the application states that DMM will have and operate a laboratory and assay lab on site. The draft permit also requires this. However there is no mention how the wastes from the lab will be disposed off. Lab wastes can not be co mingled with the

tailings material as then the co mingled wastes will be considered to be a RCRA wastes and fall under the rules of RCRA.

DMM inaccurately represented its intent to operate a laboratory, which was subsequently repeated in DEQ's Draft Permit. DMM does not have the facilities or expertise to complete all of the analytical procedures for process wastewater and spent ore. DMM will be relying on a certified laboratory in Boise to undertake this task.

Comment/Response 282.

Commenter: Richard G. Rogers, Boise

Page 27 discusses monitoring however details were not presented on the collection of background data prior to start up.

Page 28 discusses low levels of heavy metals and said their levels were low. These results should be attached so everyone would know their actual values. Especially for the contaminant selenium. Also I would suggest vanadium be analyzed for.

Page 28 discusses ground water well construction and proposes PVC casing with metal casing as a substitute. The only metal casing suitable is stainless steal all other metal casings are subject to corrosion and thus contaminating the ground water quality sample.

DEQ agrees that the application neither reveals all of the ground water wells accurately nor adequately describes ground water conditions and geochemistry within ten miles of the site. However, DEQ believes that the requirement of source controls, in the form of the leak detection/leak collection system, its monitoring, and operating and maintenance plan sufficiently addresses the risks to surface and ground water quality.

The Draft Permit need not be modified to respond to this comment.

Comment/Response 283.

Commenter: Richard G. Rogers, Boise

All through out the application there is reference to the use of standard methods for laboratory analysis however the application and the permit needs to be specific with respect to the procedures. Such as ground water samples are to be done with the standards approved for drinking water analysis and samples are to run total metals. Also no filtering of the samples is to occur prior to analysis.

The reference made to determine sampling protocol after the issuance of the permit needs to be determined in the permit and not later as proposed on page 27 of the application.

Agreed. Analytical techniques as well as Quality Assurance /Quality Control will be stipulated in the Final Permit.

Comment/Response 284.

Commenter: Richard G. Rogers, Boise

Additionally I propose that chlorination by products be monitored in the pond water in the and in the ground water monitoring wells. In particular trihaolmethanes and haloacetic acids.

Given the amount of neutralization chemicals that are intended to treat 22,000 tons, and the distance to local receptors, the level of potential risks to not warrant this level of analysis.

Comment/Response 285.

Commenter: Richard G. Rogers, Boise

In the water management plan of the draft permit #2 the BMP's need to be identified. Are you discussing DEQ 's BMP's for stormwater?

The Storm Water Management Plan, which includes locations of BMPs, has been revised to provide (site specifically) for water management around the modified engineered facilities proposed by DMM.

Comment/Response 286.

Commenter: Richard G. Rogers, Boise

Section XI of the draft permit # I discusses when there is less than 2 feet of free board in the storage pond and that DEQ is to be notified. However this section needs to be expanded to require DMM to bring in appropriate skid mounted treatment equipment so as to treat this water to drinking water standards prior to discharge. This is necessary with respect to the location of this facility and the protection of public health and safety. Quite frankly this should be required for all process water prior to final disposal instead of land applying with no treatment which has been the practice at other cyanide facilities.

There are additional requirements in the draft permit that I support that are above the normal permit but I believe they are necessary to protect human health and safety.

Agreed. Development of less than two feet of freeboard would be a material violation of the permit, as would any contingency plan to treat and dispose of the water if that contingency was not approved in the Final Permit. DMM will be required to provide for this contingency in advance of issuance of a Final Permit.

Comment/Response 287.

Commenter: Robert Boester, Boise

At first, I was inclined to shrug off the proposal for starting a goldmine by DMM. It appeared to be a small operation which intended to install all the necessary safeguards. However, after reading the article "There is gold in them thar hills" by Cynthia Sewell in the January 22, 2005 issue of the Boise Weekly, I completely changed my mind.

According to the article in BW (which I feel you should read yourself):

* DMM stated it was based in California. It is not registered in Calif. It is registered in Nevada, together with 17 other corporations owned by the same person, a Mr. Daniel Terzo. If not an outright lie, this is still a misrepresentation of the facts,

* **Seven of Mr. Terzo's other corporations are in default. I am worried that the gold mine in question could -in view of Mr. Terzo's past business record- very possibly go in default too. Since the company would only be liable to the tune of $25,000 for any remedial action, required after such a default, the State of Idaho (that means we, the tax payers) would be left holding the bag, so to speak.**

The requirement of a $25,000 bond is specifically tied to ensuring neutralization of process wastes and waste water if the facilities are abandoned. DEQ's authorities do not extend to requirements of personal and property liability or catastrophic environmental liability insurance.

By Rule, DEQ cannot change its requirement of a $25,000 bond.

Comment/Response 288.

Commenter: Robert Boester, Boise

DMM's so-called "water rights" in the area have not been established

DEQ's Rules do not provide for water rights analyses or arbitration.

Comment/Response 289.

Commenter: Robert Boester, Boise

DMM's plans for monitoring leakage of cyanide are inadequate or non-existent.

Agreed. DEQ has modified the monitoring requirements, particularly within the primary and secondary containment systems, as well as the redundant double lined tailings impoundment and its leak detection and collection system.

Comment/Response 290.

Commenter: Robert Boester, Boise

Although this seems like a remote possibility, there is a possibility of cyanide falling into the wrong hands (i.e. terrorists)

This concern may be extended to almost every industrial complex.

However, DEQ has provided requirements for security to be on site 24 hours a day, 7 days a week, from the commencement of operations through its permanent closure.

Comment/Response 291.

Commenter: Robert Boester, Boise

Boise and surrounding areas are listed as being in a category 2 seismic threat area (class 1 being low and class 3 being severe). Therefore, a severe earthquake is a definite possibility. There has been considerable earlier mining activity in the project's area.

This means there may very well be mining tunnels underneath the project's area. These tunnels could turn into conduits for cyanide leakage in case of an earthquake.

In view of the above concerns, I urge you and the DEQ to deny DMM's application.

Please include this e-mail in the official record of comments. Also, please acknowledge receipt of my testimony by hitting the "reply" button in your mail program.

The engineering designs and specifications, particularly for foundation work, is based on geotechnical data derived from the site, and conforms to good engineering practices.

Comment/Response 292.

Commenter: Dave Wissenbach, Boise

I am writing to address the proposal to allow a cyanide mine tailings dump at Black's Creek near Three Point Mountain.

As I understand the mine proposal, the location of the mine is very close to the saddle between Black's Creek and Wood Creek. Absent any specific hydrological and geological study, the mine should be considered to pose a threat to the Boise City water supply, as Wood Creek drains into the South Fork of the Boise River as impounded by the Arrow Rock Reservoir. The location of the mine tailings at a high elevation relative to the surrounding area should make contamination of the Arrow Rock Reservoir and Boise City water supply a matter of concern. Other creeks in the area drain into Arrow Rock and Lucky Peak reservoirs.

Black's creek itself does not drain to Kuna as has been reported, but becomes part of Ten Mile creek which flows right into Meridian, passing through rural residential areas. I am concerned that a mining accident or act of God could result in contamination of the aquifer in the Meridian area. Many residents in the Ten Mile area still depend on this ground water. I wonder whether the mine owners have actually paid proper attention to detail in their analysis and ask you to consider the thoroughness of this analysis when deciding whether to permit the mine.

I would also request that the DEQ consider the cumulative effect of heavy metal contamination in the Boise river valley of all mining tailings and not just the effect of one isolated mine. Agriculture in Boise has shifted to dairy operations, which are likely to result in a concentration of contamination into the human food supply.

Finally, the straight line distance from the mine itself to Luck Peak Reservoir is approximately 5 miles, with over 2000 feet of elevation separating these. I'm not a hydrologist, but in the absence of a proper study by a qualified professional engineer, I'll over my opinion that permitting the mine to dump tailings in this area, even in a lined pond, presents an unacceptable risk to the public health through the possibility of groundwater movement to the watersheds supplying the cities of Boise and Meridian. I would ask that the mine not be permitted absent a better understanding of groundwater movement in the area as obtained through a careful scientific analysis and opinion rendered by licensed professionals recognized as experts in their field.

Although the proposed operation is located in a watershed that can have impacts on Boise's water supply, the scale of the project and limitations on the chemicals used make it very

unlikely that contaminants from the project would reach Boise in concentrations that pose a risk to human health. However, DEQ is requiring that processed ores and waste waters are treated to surface and ground water quality standards within the confines of the mill building prior to release to a tailings impoundment. That said, the tailings impoundment serves as a redundant water quality protection system in that it will retain all wastes and process waters for recycling. This will provide longer term analyses in response to your questions regarding the generation and transport of heavy metals towards Boise, so that final closure plans might be modified to provide for this situation.

Comment/Response 293.

Commenter: Linda Rytterager

I am writing to express my opposition to the proposal by Desert Mineral Mining to build a new cyanidation gold mining facility in Elmore County. I have several concerns.

The financial history of the business partners reveals a questionable success rate with mining ventures. It would be an enormous financial risk to the state if this site were also to fail and necessitate expensive cleanup. Even with a small mining facility, the $25,000 bond required by DEQ would not be enough to cover such costs.

The requirement of a $25,000 bond is specifically tied to ensuring neutralization of process wastes and waste water if the facilities are abandoned. DEQ's authorities do not extend to requirements of personal and property liability or catastrophic environmental liability insurance.

By Rule, DEQ cannot change its requirement of a $25,000 bond.

Comment/Response 294.

Commenter: Linda Rytterager

The company has not sufficiently explained how it proposes to get water to the site, and its plans for a leak detection system were only added after public outcry.

I am not satisfied that DMM will go beyond a minimum effort to protect the environment in its quest for ore extraction and profit.

DEQ's rules and authorities do not provide for water rights analyses or arbitration.

DEQ is, however, requiring a double lined tailings impoundment with a leak detection and collection system.

Comment/Response 295.

Commenter: Linda Rytterager

The company did not indicate sufficient means to protect the toxic chemicals at the mine site. The transportation and storage of cyanide is an unnecessary and serious threat to public health safety. The fact that the applicant planned only token security measures to protect such dangerous chemicals (a locked area and trained personnel)

alarms me. In today's climate of heightened security threats, we cannot afford to be cavalier about potential chemical weapons.

Gold mining is one of the most destructive activities in the world today. It degrades the environment and creates unnecessary risks to public safety and environmental quality. I am opposed to building this cyanidation facility in our state.

DEQ agrees with your concerns about site security, particularly in light of the fact that there will be chemicals transported and used at the site. This concern may be extended to almost every industrial complex.

However, DEQ has provided requirements for security to be on site 24 hours a day, 7 days a week, from the commencement of operations through its permanent closure. DEQ is also requiring significant modifications of the chemical storage facilities.

Comment/Response 296.

Commenter: Betty Miller

We are not against mining, but we are very concerned about cyanide experiments on Three Points Mountain. I wish they would try it out some place else.

DEQ understands your concerns, but as a matter of providing due process to DMM and in difference to the private property owner, DEQ cannot require DMM experiment with the process at another location.

Comment/Response 297.

Commenter: Betty Miller

Cattle are our paycheck, if they are poisoned we not only want paid for that cow but also the calves she would have in her good production life. A good cow will have ten to twelve calves.

Unfortunately, DEQ's rules and authorities to do not provide requirements for catastrophic environmental insurance.

Comment/Response 298.

Commenter: Betty Miller

The cyanide will pass our house transferred up the creek to the mine. If there is a wreck, the spill will go into the creek.

DEQ believes that the modified Transportation Plan and Emergency Response Plan provide adequately for this concern. They are not, however, guarantees that accidents that results in releases of chemicals will not happen.

Comment/Response 299.

Commenter: Betty Miller

Where will the cyanide be stored? How much at a time? How often will it be transported?

Approximately 6,200 pounds of sodium cyanide will be transported to and stored at the site. This will occur in approximately 1,500 pound shipments four times per year. The sodium cyanide will be placed inside an isolated storage room attached to the mill building. It will be underlain by a concrete floor with stemmed walls or siding. Access will be very carefully restricted.

Comment/Response 300.

Commenter: Roger and June Furnerm

Comments: After reading the Draft Permit, we are overwhelmed with the details and complexity of this "small scale" mining/ore processing cyanidation facility proposed by Desert Mineral Mining LLC.

We, and several of our friends are concerned about the negative results on the environment. Some suggestions:

1) a double liner with monitoring and catchment of leaks between the two liners and the earth beneath the outer liner of the tailings pond. All linings do leak, and double lining will help reduce the release into the ground underlying the pond.

DEQ has discussed and is providing for this comment.

Comment/Response 301.

Commenter: Roger and June Furnerm

2) more stringent protection and containment of the toxic chemicals used in the process, both during storage and during use. All piping, plumbing and paths used for movement of toxic materials must be placed in lined and monitored trenches or surfaces to assure a cracked or leaking joint will not go un-noticed or unprotected.

The primary and secondary systems of the mill building have been redesigned to provide for inclusion of chemical storage on a contiguous concrete floor with stemmed walls.

Comment/Response 302.

Commenter: Roger and June Furnerm

3) more frequent inspections by DEQ or a third professional party.

Unfortunately, DEQ does not have the resources to dedicate to regular inspections of the facility. DEQ will, however, make every attempt to make several inspections of the facilities at times when inclement weather or other site conditions are the most conducive to testing the protectiveness of the water quality protection systems.

Comment/Response 303.

Commenter: Roger and June Furnerm

4) more protection for possible toxic spills along the transportation path, roads etc. Is Elmore county prepared to upgrade the roads to what will be needed and be prepared for spills on their roads? What about the Idaho State roads and Federal interstate roads?

DEQ has required what we believe is the maximum extent of our authorities. Any additional regulation of transportation and road maintenance may exist within the County's authorities.

Comment/Response 304.

Commenter: Roger and June Furnerm

5) a vastly increased bond beyond the minimum currently required by Idaho State law, with we believe is out of date and unrealistic in assuring that the State of Idaho (taxpayers) are not "stiffed" for the possible cleanup costs. Desert Mineral Mining is an LLC which means that if it becomes bankrupt, all persons, partnerships and other corporations associated with with it are released from liability, such is the world of corporate law.

The requirement of a $25,000 bond is specifically tied to ensuring neutralization of process wastes and waste water if the facilities are abandoned. DEQ's authorities do not extend to requirements of personal and property liability or catastrophic environmental liability insurance.

By Rule, DEQ cannot change its requirement of a $25,000 bond.

Comment/Response 305.

Commenter: Roger and June Furnerm

Now, on the positive side:

1) turning the existing mine waste into fertilizer will be a plus. If the process is feasible it can be used in other areas of Idaho and the world. Imagine, gold and fertilizer from useless waste!

2) the jobs and expenditures will be a boost to the local economy.

We want to thank you for representing all citizens of Idaho and doing your best to protect us all, including your self and your families.

Comment/Response 306.

Commenter: Boise City

The City of Boise (City) appreciates the opportunity to submit comment on the Desert Minerals Mining LLC Cyanidation Permit Application and Idaho Department of Environmental Quality draft Cyanidation permit CN-000030 and all of the effort IDEQ has expended in making materials and information available to the City and the public. The City

currently obtains drinking water supplies from groundwater and surface water sources. Currently, approximately 20% of its drinking water supply is obtained from the Boise River and we anticipate that all additional increases in drinking water supply will come primarily from the Boise River. Therefore the City has a significant interest in proposed or potential mining activities that may contribute pollutants to surface or ground waters that are current or future drinking water supplies.

The City has reviewed the Desert Minerals Mining LLC's (DMM) application and Idaho Department of Environmental Quality's draft Permit, CN-000030, and attended the public hearing on the DMM proposal. The City believes that the proposed mining activities have the potential to discharge pollutants to the City's current and future water supply. The City has reviewed the DMM permit application materials and the IDEQ draft permit CN-000030 and has the following comments.

Support for responsible mining operations

The City's primary concern relating to this project is the protection of ground and surface waters for use by current and future citizens of the City as drinking water supply. In general, the City is supportive of responsible mining operations that preserve or enhance the quality of surface and groundwaters in the watershed that generates our current and future drinking water supply.

The use of enclosed and self contained cyanidation facilities and tailings ponds with double liners with leak detection proposed by DMM appears to be a significant improvement compared to prior cyanidation mining practices (e.g. open heap leaching techniques) and an application of technology that the City supports.

Comments on the DMM Application:

Completeness of the Application: Additional Information Necessary to evaluate the application

The City notes that the DMM application, while complete with regard to the applicable Rules for Ore Processing by Cyanidation for Small Facilities (IDAPA 58.01.13.04), omits significant information that is critical to a complete technical review by IDEQ and the public.

The DMM permit application does not contain information concerning the exact location of the ore processing facility, tailings pond, mini-pits, and other land disturbing activities (e.g. roads) which may create short or long term pollutant loads to surface and groundwaters that serve as our water supply. The DMM proposal identifies that the location is on the divide between a tributary (Wood Creek) to a water protected as a public water supply and special resource water (Arrowrock Reservoir) and a small ephemeral stream Black's Creek. Inclusion of precise location information for the proposed facilities, tailings pond, mini-pits, and roads is essential to any thoughtful review of the cyanidation application and should be included in the application materials and as a requirement for the small minerals processing rule.

A second example of additional application information necessary for IDEQ and the public to evaluate the appropriateness of the project is the baseline water quality data and proposed sampling and monitoring plan. Neither the existing water quality data nor the proposed future data proposed for collection use methods or detection limits that would provide data of sufficient quality to compare with the ambient water quality standards. The 1989 data are

one to two orders of magnitude higher than necessary to evaluate compliance with the existing water quality standards. Additionally, the proposed monitoring methods (Standard Methods 16th Edition) are four generations out of date (the current Standard Methods is 20th Edition) and can not produce data of sufficient quality to compare with water quality standards (see comment 3.b.3).

DEQ agrees that the application neither reveals all of the ground water wells accurately nor adequately describes ground water conditions and geochemistry within ten miles of the site. However, DEQ believes that the requirement of source controls, in the form of the leak detection/leak collection system, its monitoring, and operating and maintenance plan sufficiently addresses the risks to surface and ground water quality.

DEQ does agree that the Standards and Methods described for water quality sampling and analyses are outdated and must be revised. DEQ will include analyte specific requirements for analyses with appropriate MDLs that are consistent with the water quality standards of IDAPA 58.0102.

Comment/Response 307.

Commenter: Boise City

We suggest that IDEQ request additional information from DMM to allow IDEQ and the public to determine current water quality conditions and the proposed project. At a minimum, additional materials needed for an adequate review should include:the precise location of the cyanidation facilities, tailing pond, mini-pits, and roads; proposed stormwater routing and controls (e.g. BMPs or structure); and, baseline water quality sampling and data collected using current and appropriate methods (e.g. performance based monitoring with method detection limits ten times lower than the applicable standard).

In response to numerous similar comments, DEQ has required, and DMM has submitted, modified designs and specifications for the ore processing and tailings impoundment facilities, which include accurate locations of the facilities.

However, DEQ will not be reopening these details to public review and comment.

Comment/Response 308.

Commenter: Boise City

Acid Mine Drainage/Site Closure/Long Term Impacts on Water Supply/Anti-degradation Review

The application suggests that acid mine drainage is not a problem, however closure of the tailing pond includes lime stabilization, isolation and public notice and there is no remediation for the mini-pits or other disturbed lands that are the source of the gold ore. The proposed project area is on both sides of the divide, with waters on the north side of the divide draining into the South Fork of the Boise River watershed (e.g. Wood Creek). The receiving waters are tributary to Arrowrock Reservoir and are designated as drinking water supply and Special Resource Waters. Therefore, we believe that the application materials should include a Tier Two Anti-degradation review that should be made available for public review and comment, to ensure that ambient water quality of

surface waters designated drinking water supply will not be degraded by permitting and operation of the Cyanidation facility and ancillary activities (e.g. acid mine drainage from the mini-pits and other disturbed areas). We believe that the anti-degradation review for this project would focus primarily on stormwaters and runoff from areas disturbed by mining activities (ore hauling, road building…) associated with the permitting of the cyanidation facility and should be conducted by IDEQ and public noticed along with permit application and the draft permit to be in compliance with IDAPA 58.01.03.13.100.03 (e.g. "Information required shall include the following in sufficient detail to allow the Director to make necessary application review decisions concerning design, concept, environmental protection and public health").

DEQ agrees that the application neither reveals all of the ground water wells accurately nor adequately describes ground water conditions and geochemistry within ten miles of the site. However, DEQ believes that the requirement of source controls, in the form of the leak detection/leak collection system, its monitoring, and operating and maintenance plan sufficiently addresses the risks to surface and ground water quality.

DEQ will not require in this permit that a Tier Two be conducted for the facilities subject to public review and comment.

Comment/Response 309.

Commenter: Boise City

Tailings Pond Sizing/Stormwater Routing

The permit application materials include a sizing requirement for the tailings pond of the 24 hour, 100 year storm event plus two feet of freeboard with no stormwater being routed to the tailing pond. The elevation of the project is at the level where rain on snow events occur frequently. We suggest that additional analysis and if necessary, Stormwater controls (e.g. BMPs, construction of a stormwater retention structure…) of the size necessary to accommodate the 24 hour, 100 year storm event and rain on snow at levels equivalent to recent rain on snow events within the basin be requested by IDEQ to be submitted as part of the application materials and that the IDEQ conduct analysis of the proposed controls including stormwater system sizing and/or BMPs.

Based on this and other public comments, particularly those that pointed out other water uses that are conducive to water quality protection (eg fire suppression), DEQ required a reevaluation and recalculation of water balances for operations. DEQ has evaluated these revised water balance calculations and is satisfied that the revised designs of tailings impoundment more than adequately address a worst case scenario to prevent unauthorized discharges.

Comment/Response 310.

Commenter: Boise City

Anti-degradation Review

The DMM application, draft cyanidation permit, and associated IDEQ materials do not include an anti-degradation review component required by State Water Quality Standards

(IDAPA 58.01.02.051.02) for nonpoint source activities. An anti-degradation review needs to occur for this activity and appears to require the implementation of "…cost effective and reasonable best management practices for nonpoint source control." Because the proposed cyanidation facility anticipates no discharge, the analysis appears to be focused on stormwater generated on the site.

SectionVIII. Surface/Groundwater Quality Monitoring

1989 Surface Water Monitoring Data

Methods and Method Detection Limits

Methods and analytical detection limits used in 1989 are insufficient to allow comparison of the data with the applicable water quality standard for mercury, copper, and cadmium. For example, mercury data are reported with a method detection limit of 100 ng/l, the state water quality standard is 12 ng/l and the current mercury detection levels are about 0.5 ng/l. The historical mercury data are of insufficient quality to determine compliance with state water quality standards. Similar conditions exist for cadmium and copper in the 1989 data.

Additional monitoring prior to start up of the project should occur using appropriate (e.g. current) EPA approved methods (e.g. 1631 and 1669 for mercury) for cadmium, copper and mercury to establish the current surface water quality baseline. Appropriate data needs to be collected prior, during and after the project to gain a reasonable estimate of the impacts the mining and associated activities are producing in surface and groundwaters.

DEQ agrees that the methods for water quality analyses and the results from site characterization may not be consistent with accepted methods in 2004. DEQ also agrees that the application does not accurately reveal all of the ground water wells and poorly describes ground water conditions and geochemistry within ten miles of the site.

However, DEQ believes that the requirement of source controls, in the form of the leak detection/leak collection system, its monitoring, and operations and maintenance procedures sufficiently addresses the risks to surface and ground water quality.

DEQ will be changing the requirements for water quality sampling and analyses to reflects the necessity for using current analytical techniques and Quality Assurance Quality Control.

Comment/Response 311.

Commenter: Boise City

Reported Exceedance of Water Quality Standards for Arsenic and Cadmium

Data collected in 1989 (Appendix 5) show violation of the existing federal drinking water standard for arsenic (10 ug/l) at all 8 surface water monitoring sites in April 1989. No arsenic violations are noted for sampling that occurred in May, June and July 1989.

April 1989 data also show cadmium levels exceed the current state water quality standards based on a hardness of 25 mg/l.

Baseline conditions exceed water quality standards at least part of the year for at least two metals as the result of historical mining activities. How should the permit and IDEQ address this?

We suggest that an assessment of the impacts of additional mining activities be conducted and that activities that result in maintenance or improvements in the surface water quality of the site be permitted, but that activities that will or likely will result in continued or further degradation of surface and groundwater quality not be authorized in the permit.

DEQ agrees that the 1989 baseline data has demonstrated that exceedances of drinking water standards may occur locally as they frequently do in all historic mining districts. DEQ also agrees that the application does not accurately reveal all of the ground water wells and poorly describes ground water conditions and geochemistry within ten miles of the site. However, DEQ believes that the requirement of source controls, in the form of the leak detection/leak collection system, its monitoring, and operations and management procedures sufficiently address the risks to surface and ground water quality relative to the operations of the proposed and not the historic mining facilities.

DEQ does not have the appropriate resources and funding, and consequently will not be able to address historic mining impacts or ambient water quality issues that are related either to conditions that developed as a result of historic mining or were natural due to the local mineralogy. This is the main reasoning behind focusing engineering design and specifications on source controls at the proposed facilities.

Comment/Response 312.

Commenter: Boise City

Analytical Methods (Section VIII.G, page 15)

The analytical methods proposed for use in the draft permit on page 15 (VIII.G) are significantly outdated (Standard Methods 16th Edition versus current Standard Methods 20th Edition) and of insufficient quality to allow for meaningful comparison with state and federal water quality standards.

We suggest that the draft permit monitoring requirement be proposed as performance based set of method detection limits using current and appropriate EPA approved methods (e.g. cadmium MDL: 0.5 ug/l; silver MDL: 0.5 ug/l). The goal should be for analyses with method detection limits of 1/10th the water quality standard (e.g. the federal arsenic Drinking water standard is 10 ug/l; the MDL should be 1.0 ug/l or as close to 1.0 ug/l as is practicable).

Agreed. DEQ will incorporate these suggestions as permit requirements.

Comment/Response 313.

Surface and Groundwater Monitoring Requirements

One important metal included in the 1989 and 2004 monitoring but not contained in the draft permit surface water monitoring plan is mercury. Mercury should be included as an analyte

because the two downstream reservoirs increase the potential for mercury methylation, which is easily incorporated into the food chain and that serve as public water supplies.

We suggest that mercury be added to the ground and surface water monitoring list and that DMM be required to participate in the statewide fish tissue mercury monitoring program as a permit requirement.

DEQ does not agree. Although there are numerous sources for mercury in the Boise River Basin, both natural and anthropogenic, there are no indications that the area around the proposed operation contains any such sources. Furthermore, neither the 1989 nor 2004 data indicate that mercury is a contaminant of concern.

However, DEQ will require sampling and analyses of spent ore and process waste water to include mercury analysis. This analyte will be dropped from the list of analytes if, after the first 30 days, no indications of mercury are found.

Comment/Response 314.

Commenter: Boise City

Stormwater Permitting Requirements

The permit application states that no stormwater will be routed to the tailing impoundment, however a stormwater management plan is not included in the permit application materials or required in the IDEQ draft permit. In 2000, EPA issued a National Pollutant Discharge Elimination System (NPDES) Multi-Sector General Permit (MSGP) for Industrial Activities. One of the industrial activities included in the MSGP is Gold Ores, SIC 1041.

It appears that DMM may be required to obtain a MSGP for Industrial activities. Our understanding, if this is the case, is that DMM would be required to file a notice of intent, develop and implement a Stormwater Implementation Plan, notify local units of government, and that IDEQ would be required to review and issue a 401 certification for the MSGP that evaluates the proposed BMPs and determines that the proposed BMPs are adequate to ensure attainment of state water quality standards.

The draft permit should include requirements for DMM to obtain all applicable federal, state, local permits prior to commencing operation and provisions to enforce this requirement (e.g. possibly at II.C).

The Rules and the Draft Permit both stipulate that nothing in the Rules or Permit may be construed by the permittee to circumvent their responsibilities for permitting under any other federal, state or local laws, statutes ordinances, rules or regulations. The Rules do not, however, authorize DEQ to require that a permittee obtain all other necessary permits to conduct business or operations. DEQ does, however, agree that DMM should have an official determination made by EPA regarding its requirements under the NPDES program for a multi-sector storm water permit.

Comment/Response 315.

Reclamation

Reclamation measures are proposed in the application and draft permit for the tailing pond and ore processing facilities, however no reclamation measures are proposed for the mini-pits and other disturbed land associated with the site.

The site reclamation plan should be expanded to include appropriate remediation measures for all sites activities, including but not limited to road building, mining (e.g. mini-pits), and other lands disturbed during this operation to minimize the potential for impact of surface and groundwaters.

Requirements for Reclamation Plans, particularly for open pit mining operations on state or private lands are regulated by the Idaho Department of Lands and the Surface Mining Act. Currently IDL is coordinating the Reclamation Plan approval process. It is done currently with, but separate from, DEQ's processing of applications for permits to construct and operate cyanidation facilities.

Comment/Response 316.

Commenter: IDF&G, Al Van Vooren, Southwest Regional Supervisor

The Idaho Department of Fish and Game (Department) has reviewed the reclamation plan for the proposed Centennial Mine. The proposed mine is located approximately 25 miles east of Boise, on Three Point Mountain near the headwaters of Blacks Creek and Wood Creek. The Department has the following comments and concerns for your consideration.

The project is proposing to mine gold using a cyanide heap leach process on patented land within the Boise National Forest boundary. Total land disturbance including the area to be mined, buildings, tailings site, ore stockpile, rock storage site, etc. is approximately 9.22 acres. An additional five acres of previously mined ground is proposed to be reclaimed. The Department understands that this is a small scale test project designed to process 75 — 100 tons of ore per day up to a total 36,500 tons. This initial test program is anticipated to last 275 - 365 days. A second test program may be conducted depending on the results of this first test. The cyanide milling process will be done in a self contained, trailer mounted, mobile plant. It is our understanding that all the solutions used in the milling process will not be exposed to the environment. The tailings however, would be placed outside in a lined storage facility after the cyanide has been neutralized (<0.2 mgll free cyanide).

This area is big game winter range. The general area around Three Point Mountain receives high use by mule deer (around 1,000 mule deer in an average winter) and moderate use by elk (around 200 elk in an average winter). This activity, if conducted year round as proposed, will have a negative impact on wintering deer and elk and their habitat due to chronic human disturbance.

The mule deer population in the Boise River drainage is one of the largest and most productive in the state. Approximately 27,000 mule deer inhabit the drainage and they winter in the low elevation areas of the watershed. Winter is a critical period for big game. The quantity and quality of winter range determines the herd size.

The cumulative impacts of recent development and planned future development in big game winter range in the Boise front is making already limited winter range even more critical. Continual year-round disturbance that would result from this mine would result in further unmitigateable impacts to wintering big game and further diminish the

value of the winter range to wildlife. Therefore, if this permit is approved, the Department recommends DEQ require the operator to cease operations during the critical winter period, at a minimum December 15 through March 15.

This area is heavily used by other wildlife as well. There are 66 species of mammals and over 200 species of birds that use the area.

The Department also recommends that the area to be mined or otherwise disturbed by mining related activity be fenced with deer and elk proof fencing to keep wildlife out of the area. The tailings pond should be concealed from view so as not to attract wildlife, especially birds.

DEQ appreciates the determination that developing of the foothills and Boise Front significantly reduces wildlife habitat. DEQ also appreciates that projects such as DMM's proposal pose inherent risks to wildlife from both a safety and toxicological perspective.

DEQ cannot provide for the temporary loss of habitat, but has provided requirements in the permanent closure plans for returning the site beneath the ore processing facilities to a state that is most conducive to the natural beneficial use of the land as wildlife habitat. Furthermore, DEQ is requiring that points of exposure to process wastes, waste water, and chemicals be fenced to exclude large animals.

Comment/Response 317.

Commenter: Kevin Lewis, Conservation Director, Idaho Rivers United

IRU hereby requests DEQ to deny the DMM application based on the following:

The application submitted by DMM is incomplete and lacks the necessary information for processing. For example:

a) Section 2.a (Mineral Processing Faculty) - references "The closed Thompson Mill system" yet lacks any reference to the operational record of this system. When asked during the public meeting on 1/20/2005 for information of other applications of this technology, the applicant made vague references to other units in operation elsewhere yet an extensive web search yields no reference outside of this proposed operation. Is the public being asked to endorse experimental technology?

Neither the public nor DEQ are being requested to approve of the experimental technology. The approval process is limited to those activities and designs regulated by the Rules for Ore Processing by Cyanidation. Therefore, the operational history or success of the metallurgical process is not being evaluated. However, the protective measures taken to ensure maintenance of surface and ground water quality are.

Comment/Response 318.

Commenter: Kevin Lewis, Conservation Director, Idaho Rivers United

b) Section 2.d (Chemical Usage) - fails to list acid quantities and forms.

Agreed. However, these substances and their quantities need only be contained and kept up to date within the MSDS sheets on file at the site.

Comment/Response 319.

Commenter: Kevin Lewis, Conservation Director, Idaho Rivers United

c) Section 2.e (Water Supply) - Applicant proposes to purchase water supply from a current water right owner. This statement is inaccurate. Existing water rights in that area lists agriculture as the beneficial use. Use of agricultural water for an industrial application would be a violation of Idaho law. When asked at the public meeting about the quantity of water needed the applicant was vague. Further pressed regarding where the water was coming from, applicant then stated that they might purchase water elsewhere and deliver it via truck. This raises more concerns, such as, where is this water to be purchased? Does the seller have the legal authority so sell water for this industrial operation? How does this affect the traffic load on the narrow, winding access roads to the project?

This application need to state explicitly the source of their water supply and the total quantity of water this project will require daily for all aspects of project operations.

Evaluation or arbitration of water rights is beyond the scope and intent of the Rules for Ore Processing by Cyanidation. These issues might more appropriately be addressed by the concerned public or the Idaho Department of Water Resources.

Comment/Response 320.

Commenter: Kevin Lewis, Conservation Director, Idaho Rivers United

d) Section 2.i (Security) - The application states "The process area would be fenced and locked at all times. DMM will have trained personnel onsite at all times during operations..." This statement is far from adequate considering that there will be on-site storage of up to 1,500 pounds of Sodium Cyanide along with a host of other hazardous chemicals.

DEQ does not agree, nor do the Rules provide criteria for site security.

Comment/Response 321.

Commenter: Kevin Lewis, Conservation Director, Idaho Rivers United

Lack of guarantee that DMM will operate the project in compliance with Idaho law. On December $_{6}$th and $_{10}$th of 2004, the Idaho Department of Lands (IDL) conductedsite visits in conjunction with reviewing the reclamation plan submitted by DMM. IDL found numerous violations onsite and issued notices of non-compliance for:

a) non-compliance with the Surface Mining Act

b) non-compliance with other permits

c) erosion control measures inadequate

d) inadequate maintenance of roads / improvements

e) inadequate bonding

IRU has great concerns that if the applicant is unwilling to follow Idaho law in the process of applying for their permit, they will show further disregard for permit requirements in the future. Despite the impassioned statement made by project property co-owner Mel Fisher to the effect of what good a neighbor DMM would be, their actions are far from positive. Further, Idaho law fails to allow DEQ to require bonding that even approach the actual expense of reclamation. What guarantees exist that the taxpayers of Idaho are not saddled with the expense of site restoration in the event of project default?

DEQ does not disagree with the concerns expressed with respect to this issue. However, the Rules do not provide past history relative to compliance issues as a criteria for denying permits. This criteria may be more appropriately discussed and resolved in a negotiated rule making process through which DEQ's Rules might be amended.

Furthermore, the requirement of a $25,000 bond is specifically tied to ensuring neutralization of process wastes and waste water if the facilities are abandoned. DEQ's authorities do not extend to requirements of personal and property liability or catastrophic environmental liability insurance.

By Rule, DEQ cannot deny a permit based on past performance or compliance, and it cannot change its requirement of a $25,000 bond.

In closing, Idaho Rivers United believes the public's interest is best served by denial of the DMM application. If DEQ chooses to continue the permitting process, the application should be rejected until such time DMM chooses to file a complete application for public review. Furthermore, should DEQ ultimately issue DMM their requested permit, DEQ has a responsibility to the public to closely monitor DMM's ongoing operations and actively enforce the terms of the permit including revocation proceedings for material violations.

Comment/Response 322.

Commenter:, John Westra, Manager, Western Region, IDWR

Recently an application for mine processing was submitted to the Idaho Department of Environmental Quality for review and approval. The public meeting scheduled in late January 2005 and media attention has yielded many inquiries to the Department of Water Resources (IDWR) regarding the facility water source. A review of the application finds that it does not detail the water source, flow, or volume required for the processing operation. The application only (page 13) states that water use requirements are "estimated at less than 25 gallons per minute."

Our water right records list only in-stream stockwater rights for the proposed facility area, and I am not aware of any contact or water appropriation applications filed by your firm with IDWR. The proposed facility location is in the upper Boise River Basin. Surface water in the basin is considered fully appropriated, and at present, new applications for basin ground water are not being processed. An existing water right may be moved to the location by the transfer process; however, transfers require significant processing time.

Please be advised that diversion and beneficial use of public water in Idaho requires a form'of water right. Failure to obtain proper water rights is considered an illegal

diversion, and is subject to fines and penalty enforcement by IDWR pursuant to Idaho Code: §42-35 1 & §42-1701(B).

DEQ appreciates IDWR's comments regarding water rights.

DEQ's Rules and authorities explicitly state that nothing in any the Rules or permits allows the permittee to circumvent its obligations under any other federal, state and local law, ordinance or rules and regulations. Specifically, DEQ's authorities do not provide for water rights analyses or arbitration. Resolution of this issues lies solely on IDWR and its authorities.

Comment/Response 323.

Commenter: Rick Just, Coordinator, Comprehensive Planning, Research and Review, Idaho Department of Parks and Recreation

A monitoring station on Upper Woods Creek is critical for public safety. The drainage goes into the South Fork of the Boise River. This river is a popular boating and fishing drainage.

This has been required in the Draft Permit, and will be carried through into the Final Permit.

Comment/Response 324.

Commenter: Rick Just, Coordinator, Comprehensive Planning, Research and Review, Idaho Department of Parks and Recreation

The 2002, and 2004 Idaho Outdoor Recreation Surveys found that "Protecting Water Quality" was the most important issue affecting outdoor recreation with Idahoans.

Desert Mineral Mining facilities need to be designed to protect water quality in Blacks Creek and Willow Creek. DEQ should use the permitting process to assure that water quality will be protected.

This has been required in the Draft Permit, and will be carried through into the Final Permit.

Comment/Response 325.

Commenter: Ronald Rowland

Most people who travel the Black's Creek Road do not really pay too much attention to what is around them. They are too busy just passing through to observe the beauty that is there. Oh, they see grass, sagebrush, willows in a little creek by the roadside, many cattle. Occasionally the more observant will see an antelope, an elk, a deer, some flitting birds or rarely a reptile.

What few realize is that Black's Creek, it's pass over and into Wood Creek drainage of the South Fork of the Boise River is a major migratory route for birds through the Danskin Mountains. It is used spring and fall for this purpose. It is used spring and summer for nesting and rearing of young birds. Birds also live here fall and winter. In other words, birds

can be found using Black's and Wood Creeks drainage year round! Resident or visitor, part-time dweller, raptors, flycatchers, sparrows, warblers, thruster, and others all use this riparian zone in one fashion or another.

A mining operation on the Black's/Wood creeks summit has the potential to threaten this lifeline of the birds. Increased traffic, light, air, and noise pollution, potential for chemical petroleum distillate spills. Increased sedimentation of the watersheds, disruption of the water table of these two creeks' lead waters of at the mine site.

I understand that there will be fuel and chemicals stored on site in concrete pits or storage areas. Will these be stored separately, at some distance? Will the concrete slabs have liners under them? Concrete is porous, what about protection form the weather to prevent water from coming into contact with the stored chemicals? Will chemicals be mixed in the storage areas or will a place be set aside for this? What about spills in the storage or mixing areas?

DMM's operating plans have been modified to stipulate that all spills of chemicals and other deleterious materials will be immediately cleaned up, neutralized, and appropriately disposed. Furthermore, an accurate log should be kept relative to such spills and should include when they occurred, who responded to them, when response occurred, and what the final disposition is of the spilled materials and of any soil or water that was contaminated by the spill.

In response to this and similar comments, DMM has submitted, for DEQ review and approval, engineering drawings, designs, and specifications for the mill building that depict these secondary containment features (stemmed walls). The designs and specifications were prepared "For Construction." Engineering drawings, designs, and specifications for the mill building have been signed and stamped by a Professional Engineer registered in the state of Idaho. The plans and specifications provide for appropriate sealing of seams and cracks. The Revised Operating Plans also provide for routine maintenance and cleanup of all spills of chemicals and other deleterious materials from the secondary containment, either returning them to the processing or treatment circuits of the mill, or sending them to appropriate disposal off-site.

Comment/Response 326.

Commenter: Ronald Rowland

In clean-up areas what is to be done about collecting and disposing of the water or cleaning agent?

Although it is not anticipated at this time, the decommissioning, decontamination, and dismantling of the ore processing equipment and facilities may require collection and disposal of wastes that would be more appropriately disposed in a facility such as American Ecology's landfill.

The Final Permit will stipulate that, at closure, all milling equipment and plumbing of the milling facilities will be dismantled and decontaminated, and that the resulting waste products will be characterized, treated, and disposed according to their characteristics.

Comment/Response 327.

Commenter: Ronald Rowland

This is a desert will nets be considered to keep birds out of the tailings ponds? Fences are to be put around the main mine site to keep wildlife out of the ponds, what about the rest of the property to keep cattle out?

Although the potential sources of exposure for large animals will be fenced, the Rules do not provide for exclusion of birds, reptiles, or other small animals.

Comment/Response 328.

Commenter: Ronald Rowland

At what point does an accidental spillage of chemicals or fuels trigger a hazardous response? To where will this material be removed for disposal? How often?

Reportable quantities for fuels and chemicals are based on federal standards of 25 gallons, but DEQ is requiring that all spills be immediately cleaned up and recorded in a log that is available for DEQ's evaluation during inspections.

There are more questions. I feel that his proposal as it is now constituted should be returned for more work to be done and resubmitted next year.

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Section Two: Comments Relative to Financial Assurance and Leak Detection/Collection

Section Two addresses two comments that are frequently made by the public regarding the Draft Permit. The first comment specifically criticizes the inadequacy of a $25,000 bond for Desert Mineral Mining LLC. The second emphasizes the need to require a leak detection collection system.

DEQ discussions and resolutions regarding these two topics are presented below, followed by the specific comments received on the same topics.

Discussion and Resolution Regarding Financial Assurance Requirements

The *Rules for Ore Processing by Cyanidation*, IDAPA 58.01.13.650.02, provide the following with regards to financial assurance:

> "The amount of financial assurance shall be determined by multiplying five ($0.05) cents by the number of tons of unprocessed ore, and the projected number of tons to be leached with cyanide within the next calendar year, unless the permittee requests an amount based on a projection of more than one (1) year; however, the **minimum** amount of financial assurance shall be the sum of twenty-five thousand dollars ($25,000), and the maximum shall be the sum of one hundred thousand dollars ($100,000)."

Numerous comments requested that bonding be increased commensurate with the actual costs of cleaning up any spills that occur, either during transportation of chemicals or during their use and disposal at the facilities on Three Points Mountain. However, this is not the purpose of this bond, nor is the requirement for such insurance a condition within the Rules.

Because the calculated bonding for processing 30,000 tons of ore is calculated to be fifteen hundred dollars ($1,500), and the minimum amount required by IDAPA 58.01.13.650.02 is twenty-five thousand dollars ($25,000), DEQ will require a minimum bond of twenty-five thousand dollars ($25,000).

No change will be made to the Draft Permit with respect to financial assurance.

Discussion and Resolution Regarding Leak Detection/Collection System Requirements

The Rules for Ore Processing By Cyanidation, IDAPA 58.01.13.200.02, also provide for the requirement of "Impoundments, other than for emergency runoff, containing or designed to contain process water shall be designed for efficient leak detection, and provide for leak recovery."

DEQ is requiring a leak detection and collection system to be designed and constructed according to engineering criteria set forth in the Draft Permit. The narrative and

engineering drawings for design modifications for the tailings impoundment, which must include a leak detection and collection system, must be signed and stamped by a Professional Engineer registered in the state of Idaho and submitted for review and approval by DEQ prior to approval of the Final Permit. Subsequent to approval of the Final Permit, the registered Professional Engineer or a qualified representative of that Professional Engineer will provide construction Quality Assurance and Quality Control for installation of the tailings impoundment and leak detection leak collection systems. Upon completion, and prior to operation of the cyanidation facilities, the Professional Engineer will complete, sign, and stamp "As-Built Drawings and a Narrative Report," ensuring that the construction meets or exceeds the engineering criteria specified in the Final Permit.

Specific Comments on Financial Assurance and Leak Detection/Collection

Comment/Response 329.

Commenter: Chuck Link

Common sensibility would dictate that an individual endeavor that threatens the welfare of many should have to provide adequate assurance to protect against the unknown or unexpected. In this case, a $25,000 bond for the "cleanup of any mess" is ludicrous! The bond should be based on a thoughtfully developed cleanup of a worst case scenario -- take it or leave it!

And if laws need to be changed, the DEQ, if it is committed to its namesake, should be first in line next month at the State Capitol to get the job done and to better protect Idaho!

The recent public disclosure of the permit application to operate a mine on Blacks Creek Road raises many questions but I will only address a couple.

The foremost is the potential for groundwater contamination due to an accident with the cyanide and/or related tailings pond concentrations of hazardous trace metals. While DMMs management has indicated that the tailings pond will be equipped with a liner, what protection do the neighbors have after the company finishes their operations in the estimated five years they indicate? I assume that the ridiculously low $25,000 bond leaves with them so who will step in to fix a contamination problem that develops two or three years later? (Let me guess . . ..) Even Rick Frechette, a Nevada mining engineer, conceded that "technically, all liners leak." And what if there are no public monies available anywhere for any remedial action . . . are the neighbors left with no recourse but to pack up and start over someplace else?

My past experience with cyanide gold mining activities also included the use of chlorine as a neutralizer, or the use of bleach as they innocuously refer to it in their business plan; but the use of chlorine introduces a serious potential public hazard, especially in concentrated gaseous form. Is this being addressed properly as to an emergency plan that would include leak detection and, if quantities were sufficient, notifying downwind area households of the need to evacuate?

As I indicated earlier in my initial brief e-mail, common sensibility would dictate that an individual endeavor that threatens the welfare of many should have to provide adequate assurance to protect against the unknown. In this case, a $25,000 bond for the cleanup of any mess is ludicrous! The bond should be based on a thoughtfully developed cleanup of a worst-case scenario -- and they can take it or leave it! And if laws need to be changed, the DEQ, if it is committed to its namesake, should get in line at the State Capitol to get the job done and to better protect Idaho!

I see little rewards for Idaho in allowing this project to go forward. The number of jobs it creates is not worth the risk when compared against the potential harm to the environment.

Comment/Response 330.

Commenter: Mary Schofield, Boise

Regarding the above, I am registering my complete opposition to this proposal. It would be a travesty if some poorly formed technical requirements allow this gold mine to be approved. We all know that Desert Mineral Mining is in this for one thing only: money. They have no stake in the environment or the people living near this area. And, at a bond of $25,000, there is no risk to them of environmental failure. Once again, it would be the people of Idaho, for decades to come, who would subsidize their desire to make money. A bond of $25 Million would perhaps be meaningful, but still unable to compensate for our priceless land.

The people of Montana were smart enough to recognize the fallacy of allowing cyanide use in mining; I sincerely hope Idaho does likewise.

Comment/Response 331.

Commenter: Jonathan Oppenheimer and Family, Boise

I am strongly opposed the proposed Gold Mine on Blacks Creek in Elmore County.

I am especially concerned about the lack of a meaningful comment period. The comment period MUST BE EXTENDED in order to solicit comments from concerned citizens of the area. Further, the documents listed on the DEQ website were inoperative. I was unable to view the public notice, the Draft Permit, or any of the Application materials. I encourage you to fix this problem and extend the public input solicitation.

The first I, or most area residents learned of this proposal was during the week of christmas. With stories in the Idaho Statesman and the Boise Weekly coming only 10 days before the end of the comment period, the DEQ has clearly failed to adequately solicit comments and should extend the deadline to ensure that individuals have the opportunity to voice their concerns. Otherwise, you will surely neglect to consider the full range of impacts from this proposal.

The impacts of a gold mine utilizing cyanide to process the ore have impacts that last generations. The water quality in the Boise river, the South Fork and tributaries could be significantly impacted by such a mine.

As a former resident of Montana, I know all too well the results of Gold mining using the cyanide method. To my knowledge, every cyanide-processing gold mine in Montana has failed to adequately protect ground water or surface water. If you would like more information on the Beal Mtn Mine, the Kendall Mine, the Golden Sunlight Mine, or the Zortman-Landusky Mine, I encourage you to visit [http://www.meic.org/hardrock.html]. Every gold mine using the cyanide leaching process has greatly impacted local waters, residents and their ways of life.

I am a fisherman and a father. My family and I enjoy recreating on the South Fork of the Boise River and on Arrowrock Reservoir. We also enjoy the rural nature of the area. A gold mine will detrimentally impact our enjoyment of the area, and the eventual contamination of the area will significantly affect the potential for the area to be enjoyed by future generations.

The proposed $25,000 will act as a direct incentive for the mining company to leave the State of Idaho with a multi-million dollar clean up bill. Again, I encourage you to investigate the liabilities that the residents of Montana face as a result of abandoned mines there.

If you do permit the mine, bonding should be set at a significantly higher amount. Please reference comparable cleanup costs from cyanide-processing gold mines in other states or countries and set the bonding rate accordingly.

As a taxpaying resident of the State of Idaho, I should not be responsible for the costs incurred by an out-of-state mining firm that will abandon the state with a multi-million dollar clean-up tab.

Finally, I was a resident of Alberton, Montana. In April of 1996, a train wreck spilled thousand of pounds of toxic chlorine, potassium creslate and sodium chloride into the air and water. The train wreck closed Interstate 90 for two weeks. The direct and indirect costs of this accident continue to impact area residents and businesses.

Transporting cyanide to and from the area is likely to result in a similar catastrophe. The narrow rural roads, sharp corners and poor visibility should be considered, as should the impacts of an eventual spill into the area's ground and surface waters.

Please let me know when you have fixed the website, so that the permit, public notice and application information are available to the public. Please also feel free to contact me if you have any questions or concerns about these comments.

Comment/Response 332.

Commenter: E. C. Scheider Boise

I wish to comment on the Desert Mineral Mining proposal to mine an area near Blacks Creek Road and the Atlanta Gold Corr proposal to open pit mine near Atlanta.

I don't object to the proposals to mine, but I do object to the cyanide process with little or no posting of a bond. A $25000 bond in the case of the Blacks Creek proposal is ridiculous. Although it is located in a desert environment, heavy rains do occur and would result in a major contamination in the event of a leak. This area has explored and mined off and on for a good many years with what appears to be little success.

Whether the cyanide process would be successful is doubtful but the likelihood on a leak is not. Cleanup after a leak would cost many times more than the $25000 bond. After a failure the miner has no incentive to spend money on a failed project leaving the mess to perhaps a superfund site.

I gather you do not have jurisdiction on the Atlanta site but I'll comment anyway. Again a high bond is the only way that operation should be allowed to proceed. A risk/benefit analysis should be made before any consideration be given to the project. A cyanide dump into the middle fork of the Boise would be a disaster. Even the minor mercury release a few years ago caused some real problems.

We have enough examples throughout the west of irresponsible mining operations that are being partly cleaned up by tax money. Silver Valley generated great wealth for a few at the expense of many. I think it is past time for us to say no to some of these schemes.

I realize my comments have no specific facts but in general a bond in the magnitude of any foreseen cleanup cost should be a minimum. Anything lower than that should result in a refusal to allow the operation to proceed.

Comment/Response 333.

Commenter: Joseph E. Youren

I am adamantly opposed to any cyanide use for the purpose of gold mining on the or anywhere near the Boise River watershed. I am appalled that the state I live in would even consider this proposal. These companies have been forced to leave Montana (not exactly a hotbed for environmental extremism) because that state has recognized the danger and outlawed the process. It saddens and frightens me that Idaho encourages them to bring their operations here. A $1 million bond would be inadequate considering the cost of cleaning up a spill. The $25000 bond is almost criminal negligence.

Comment/Response 334.

Commenter: Sonia Heidinger, Boise

Please help protect the Boise River from a second cyanide gold mine twenty miles upstream from Boise. The proposed Centennial Mine would be located next to a popular recreational area and along the main road to the South Fork of the Boise River, an important winter range for deer and elk.

There is definite risk for mining operations to contaminate surface and ground water--at a site that is only 16 miles as the crow flies from the City of Boise, which receives 20% of its drinking water from the Boise River!

Such use of cyanide for mining operations has been banned in nearby Montana, and should be in Idaho as well.

My neighbors and family use and enjoy the Boise River, Lucky Peak and Arrowrock Reservoirs, as well as the South Fork of the Boise River, into the Danskin Mountains multiple times each year, in all seasons.

At the minimum, to protect Boise and its citizens, the cyanide tailings pond must have a double liner with a leak detection and removal system. Additionally, the cyanide bonding must be increased from $25,000 to fully cover the costs of any likely spill.

Comment/Response 335.

Commenter: Patrick Edwards, Chandler, AZ

We have had a cabin near Lowman on the South Fork of the Payette since the early 60's and are quite concerned about any mining along it's watershed. We regularly fish, hunt and raft the river all the way through to the Main Fork.

We strongly urge all precautions be taken to insure no leakage or seepage into the watershed. Specifically we ask the DEQ require that the cyanide tailings pond have a double liner with a leak detection and removal system.

We also ask that the DEQ increase the cyanide bonding from $25,000 to fully cover the costs of a spill.

Finally, I'm wondering why it's O.K. to have such a risky operation in our neighborhood?

Comment/Response 336.

Commenter: Laura Girardeau, M.S., Moscow, ID

As an Idaho resident and former US Forest Service biologist with a master's in environmental science, I am also frequent tourist to Idaho's wild places for hiking and recreation. I urge you to preserve the recreation potential of the Boise River, Lucky Peak and Arrowrock Reservoirs, the South Fork of the Boise River, and the Danskin Mountains.

All of these areas are threatened with permanent pollution from mining wastes. We know the legacy this leaves. The land becomes unusable for recreation, agriculture, business because by law it must be posted as toxic. Water contamination magnifies this effect up the food change, and wildlife becomes endangered. It would be a wise investment in Idaho's future and economy to require that mining waste is prevented from entering the water supply by installing double, leak-proof liners in tailings ponds, with leak detection and removal systems. **Cyanide bonding should be increased to fully cover the costs of a spill.** All methods possible should be taken to prevent contamination of these areas, not only for the public and wildlife's protection, but for protection of Idaho's economy and the companies who are creating the waste. We all know that clean-up efforts after spills have already occurred cost much more than prevention, and lawsuits are costly.

Comment/Response 337.

Commenter: Jan Nissl, Boise

I've kayaked the South Fork and know many people who enjoy the entire Payette and Boise River systems.

Please ensure our safety and the environment within the river systems by having strict regulations and requirements for any proposed gold mining.

Please require that the cyanide tailings pond if approved has a double liner with a leak detection and removal system.

Also be sure to increase the cyanide bonding from $25,000 to fully cover the costs in the event of a spill.

Comment/Response 338.

Commenter: Christopher Garlock, Meridian

I realize that mining is a need. If it can't be grown, it must be mined. I would however ask that careful consideration be given to the proposed gold mining operation. Cyanide in any concentration is a deadly chemical and the thought of it accidentally entering the Boise river is very unpleasant. **If this mine is allowed to operate please make sure that they have more than enough money to pay for a complete cleanup of all affected areas should contamination occur.**

A cyanide detection system, leak detection system should also be required in the tailing ponds. I realize that this is something you probably already know about and I personally do not jump on the bandwagon when it comes to these issues. However with it being so close to an area that I frequent in the spring, summer, and fall, I would ask that this project be heavily scrutinized.

Comment/Response 339.

Commenter: Paul Tower , Boise

As a Boise resident and outdoor enthusiast, I share the interest with many of my friends and neighbors in keeping our surrounding areas as attractive as they were when we were drawn to live here.

The South Fork of the Boise River and the Danskin Mountains offer wonderful recreational opportunities for us all. It is particularly important that we exercise the utmost care when considering potentially damaging ventures in the area.

Please insure that the best possible liner (preferably double), leak detection and removal systems are used at the cyanide tailings pond.

As an added precaution, please require that a bond be set for an amount that meets or exceeds the cost of cleanup, should a spill occur. With interest rates low, this should not significantly add to the cost of doing business. It is also a way to insure that the mining company has sufficient investor faith in minimizing or eliminating negative environmental

impact. And finally, it insures that the area will remain clean to insure its aesthetic appeal as well as the health of Idaho citizens and our visitors.

Comment/Response 340.

Commenter: Jon Cecil, Meridian

As a Treasure Valley resident, my family and I have come to enjoy some of the local environmental amenities like the Boise River, Lucky Peak and Arrowrock Reservoirs, and the South Fork of the Boise River. We like to hike, picnic, and camp and we are concerned that a proposed cyanide gold mine 20 miles upstream from Boise could threaten the watershed that many of us enjoy.

As you are aware, the proposed Centennial Mine would be located in the Danskin Mountains next to a popular recreational area and along the main road to the South Fork of the Boise River. The Danskin Mountains also serve as important winter range for ungulates such as deer and elk.

Even though this project is much smaller in scale than the Atlanta Gold mine, there is still a risk for mining contamination to surface and ground water. The proposed mine would be a mere 16 miles from Boise, which receives twenty percent (20%) of its drinking water from the Boise River.

At a minimum, DEQ should require at least two measures. First, in order to minimize the potential for leaks the Idaho Department of Environmental Quality (DEQ) should require, as a minimal measure, that the cyanide tailings pond have a double liner with a leak detection and removal system. Second, DEQ should also increase the cyanide bonding amount from $25,000 to fully cover the costs of a spill.

Comment/Response 341.

Commenter: Katherine Lanspery, Moscow, ID

Dear Mr. Schuld, I am writing comments regarding the potential effects that the Centennial Mine may have on the recreation value and the drinking water quality of the Boise River. Currently, I live in Moscow, Idaho, but I resided formerly in Boise for four years. This makes me and my husband appreciate the location of Boise in regards to recreational opportunities. This is the number one bonus to living in Boise. The South Fork of the Boise River is a tremendous river sports area, and should be left.

To ensure that this area is not contaminated the **DEQ should require that the cyanide tailings pond have a double liner with a leak detection and removal system, allowing protection of Boise's drinking water.**

In addition, the DEQ should increase the cyanide bonding from $25,000 to fully cover the costs of a spill. This benefits tax payers and ensures sound practices by Centennial Mine.

Comment/Response 342.

Commenter: Kathie Rivers, Ketchum

I am a recreational kayaker who has often floated the So. Fork of the Boise River. I have also mountain biked in the Trinity Mountain area. I am completely opposed to the proposed cyanide gold mine in that area. **At an absolute minimum, it should not be permitted without that the cyanide tailings pond having a double liner with a leak detection and removal system.**

In addition, since this proposal has such potentially dangerous impacts, the cyanide bonding should be increased from $25,000 to fully cover all possible costs of a spill.

We, Idahoans, do not need this mine. Please let's not let the owners get away with ruining our countryside on the cheap!

Comment/Response 343.

Commenter: Richard Artley, Grangeville

As a retired Forest Service employee I object very much to any gold mine that uses heap leaching to extract the gold.

I worked with several proposals by the Doremus Corp. for such a mine on public land. All proposals were rejected as this one should. The USFS resource specialists found that there was just too much risk to a great many people, wildlife and fish just to make a few select individuals wealthy!

Although I live north of Boise, my family hikes and camps in the Danskin Mountains.

If the Idaho DEQ decides to allow this mine in spite of the negative public comments I am sure they will receive, I ask that the following mitigating measures be REQUIRED of the mining company. I also ask that the DEQ develop a monitoring plan to assure these measures are being taken.

1) Require that the cyanide tailings pond have a double or triple liner with a leak detection and removal system.

2) Increase the cyanide bonding to fully cover the costs of a spill cleanup and site restoration. Make it cost this company dearly if they work in a sloppy manner.

Once again, most of all I hope that you deny these miners a permit to operate such a dangerous, insane operation in such a populated area.

Comment/Response 344.

Commenter: Todd & Margo Phariss, Nampa

I am commenting on the proposed Centennial Mine--by Desert Mineral Mining LLC--in Elmore County near Blacks Creek. Like many multi-generation Idahoans, I am concerned regarding the long-term effects of cyanidation mining on or near public lands. The issue that I see as most relevant is the potential cost and consequences of leakage from tailings containment enclosures, the almost ridiculously low bonding for financial assurances of only

$25,000, and the reclamation process after curtailment of mining operations. My concerns are specifically,

1. With the location of the proposed small-scale open pit operation near existing waterways that ultimately feed the Boise River system, the assurances of Desert Mining Mineral LLC that "the initial ore contains little remaining reactive sulfide ores" and the conclusion that there will be, hypothetically, low to non-existent levels of heavy metal leeching out of the tailings is overly optimistic. **At the minimum, there should be required an double liner (HDPE 60-mil geomembrane) in the tailings impoundment. Additionally, of the Draft Plan, Section VI, Part B-5 regarding a leak detection/collection system should be improved to include not only a "best practices" system acceptable to the permitting process, but the permit should specifically itemize a "best in industry" system for utmost security.**

2. The required bonding of only $25,000 is arbitrary and is not based on an accurate reflection of cost to taxpayers in the case of accidental spills, leaks, or potential reclamation. The bonding requirement needs to reflect the total cost of cleanup in the incident of accidents. The currently bonding amount is pittance--it is not financial assurance. The State of Idaho, Elmore County, and local public land stewards should not be asked to assume the risk factors associated with this operation as it is proposed without sound financial backing.

This mine is close to recreational lands that I use on a regular basis. The future of the Danskins are in recreation, hunting and multiple-use. There are vastly more sound economic reasons to protect this area from short-term mining operations than the concern of Desert Mining Mineral LLC to make immediate profits with the burden of risk placed on Idaho and it's citizens. Like most "locals", there is little value for me in the proposed mine, and much risk if their overly rosy assessment of accidental leakage, transportation accidents, and future reclamation efforts are incorrect. The past history of small-scale mining in Idaho has been very, very checkered in these items. Thank you for your consideration of my concerns regarding protection of Idaho's lands and waterways from the potential serious harm this mine may represent,

Comment/Response 345.

Commenter: Gary B. Scott, Boise

I am writing to voice my concerns regarding the proposed Centennial Mine. I understand the mine will make use of cyanide for its operation, and that it’s possible contaminants might affect surface and ground water if not contained correctly. I’m a frequent visitor to the Canyon of S Fk of the Boise as an avid boater/fisherman the past 9 years since arriving here from Oregon. The river and its surrounding mountains are special to many folks, and I would certainly like to know that if the Centennial Mine goes forward then DEQ has our back. I’m hopeful the DEQ will require that the cyanide tailings pond have a double liner with a leak detection and removal system and further, that the DEQ will increase the bond from $25,000 to fully recover the costs of a spill.

Comment/Response 346.

Commenter: Tom Leppert, Caldwell

I lease rangeland from Arlene DeMeyer on Black's Creek Road where I run a herd of cattle each year. I am concerned about the proposed gold mining by Desert Mineral Mining on Black's Creek. I have two major issues; one is the amount of the bond and about the water supply.

There are at least four different herds watering from Black's creek, should cyanide or other chemicals damage that creek their $25,000 bond would not begin to clean up the land and water and compensate for the loss of our cattle.

I am also concerned about their planned source of water. We rely on natural springs and beaver ponds to water our cattle when Black's Creek dries up. How will a well impact the ground water and thus the springs that we need each year? How will their activities affect the beavers that live along the creek?

I am opposed to mining along Black's creek. This watershed has too much to lose to justify permitting this risk.

Comment/Response 347.

Commenter: Kristin Hasselblad, Boise

I am writing to express concern over the Centennial Mine would be located in the Danskin Mountains near Boise. I am aware that cyanide mines often cause great environmental damage, and I strongly oppose these mines. I use and enjoy the Boise River, and do not appreciate cyanide being anywhere near the water I swim in and drink. I am a biologist, and am concerned for the bald eagles, (an endangered species) that nest along Arrow Rock Reservoir, and possible contamination of their primary food source, fish. I raft and swim in the Boise River in the summer, and my drinking water sometimes comes from these sources as well. I am a water rights holder downstream from the mine.

I would like to see the use of cyanide for mining banned in Idaho altogether. I would rather not see the mine go in. However, at a minimum, I am asking that DEQ require that the tailings pond have a double liner with a leak detection and removal system. I also ask the DEQ to increase the bonding to a figure much higher that the $25,000 to fully and accurately cover the costs of a spill.

Comment/Response 348.

Commenter: Russell Blalack, Cupertino, CA

A Californian mining company is planning a cyanide gold mine 20 miles upstream from Boise. The mine would be right in the watershed of the South Fork of the Boise River.

I love to float and fish the Boise River, whenever I'm in town. I also like to drink clean water. So I ask you to require that the cyanide tailings pond have a double liner with a leak detection and removal system.

Furthermore, I ask that you increase the cyanide bonding from $25,000 to an amount that will fully cover the costs of a spill.

Comment/Response 349.

Commenter: Walt Gammill, Boise

Regarding the proposed gold mine on Blacks Creek - if this is approved, please ensure that the tailings pond is double lined, and that the bond required is large enough to cover cleanup of a spill)ie, millions). Better yet, do all you can to see that this project NEVER HAPPENS!

Comment/Response 350.

Commenter: Jeanne & Tom Liston, Ketchum

We would like DEQ to protect the Boise River from the Centennial cyanide mine.

This is a very popular recreational area, and the mountains also serve as important winter range for deer and elk.

We would like you to please consider the risk for the mining operations to contaminate surface and ground water. Its close proximity to the City of Boise makes it an inappropriate location, as the city receives 20% of its drinking water from the Boise River.

With this in mind, we would request that DEQ require the cyanide tailings pond to have a double liner with a leak detection and removal system. We also ask that you increase the cyanide bonding from $25,000 to fully cover the costs of a spill.

Also, please note that the use of cyanide for mining operations has been banned in Montana. Perhaps Idaho should consider a similar ban?

Thank you for your consideration of this matter.

Comment/Response 351.

Commenter: Joseph Milan, Boise

As a Boise native, I am deeply concerned about the possibility of a cyanide mine 20 miles upstream from town. I am a southeast Boise resident that recreates along or in the Boise River year-round. Additionally, my family and I have been boating on Lucky Peak and Arrowrock Reservoirs since I can remember. While I understand that extraction industries are a large part of the Idaho make-up, I would like to request that a leak proof double liner be used along with leak detection equipment. Additionally, the cyanide bonding amount should be increased from $25,000 to accurately reflect what it would cost the DEQ in the event of a spill.

Please be careful with the Boise River, it is essentially what makes Boise a unique place to live.

Comment/Response 352.

Commenter: Jennifer Robbins-Smith, Boise

I am writing to express my concern about the proposed mine. We are avid canoers and hikers, and a project of this sort may jeopardize these areas. We also have concerns about the

drinking water Boisians receive from the river as well as our wildlife who needs the river's water to be as clean as we can keep it.

I would ask DEQ to require that the cyanide tailings pond have a double liner with a leak detection and removal system. Also, please increase the cyanide bonding from $25,000 to fully cover the costs of a spill.

Comment/Response 353.

Commenter: Margaret Clay , Clayton

I am writing about the proposed Centennial Mine.

Please require that the cyanide tailings pond have a double liner with a leak

detection and removal system; and increase the cyanide bonding from $25,000 to fully cover the costs of a spill.

Comment/Response 354.

Commenter: Sally Ferguson, Boise

Thanks you for the opportunity to comment on the proposal by California-based Desert Mineral Mining to open a cyanide leach mine operation 20 miles south of Boise. The proposal has rightly sparked protests from neighboring ranchers and raised new concerns about water quality because of the use of cyanide to extract gold from ore in an area relatively close to the Boise River.

Miners and mining companies all claim their systems are "closed", whether it's indoors or in cyanide heap leach form. **They all fail**. They all have potentially monumental environmental and health risks. In addition to the cyanide problem, the reason cyanide is used is because the gold usually appears in the ore in minute quantities, something like less than half an ounce of gold per ton of the amount of material moved. So, even though the company is “limited” to 120,000 tons of ore over five years, they can potentially and literally carve entire hillsides away to get a very small (in comparison) amount of gold. And leave huge piles of mining waste behind, when the operations close down.

As well, the citizens of Montana voted in November 2004 to keep the ban on cyanide leach mining, because the state has been saddled over the years with expensive clean up operations and contaminated ground water, resulting from the failure of cyanide leach mining operations to prevent leakages from tailing ponds into streams, rivers and groundwater.

The DEQ must require that the cyanide tailings pond have a double liner with a leak detection and removal system and they must increase the cyanide bonding from $25,000, to fully cover the costs of a spill. The citizens of Boise and Idaho should not be the victims of a short term mining operation, regardless of what the company says it will do to protect the site and groundwater from environmental harm common to all cyanide leach operations.

Dennis Robinson	Mara Stone	Craig Williams
Twin Falls	Sandpoint	Idaho Falls
Lois MacLeod-Kehoe	Clyde Everton	Tim Yoder

Hope	Boise	Boise
John Pederson	George Lochert	Susan Patla
Nampa	Sagle	Driggs
Scott Bonner	Dennis Frisby	Anita Lippert
Boise	Gooding	Harrison
Beth Duke		
Hailey		

Given that the Boise River is one of the drinking water supplies for Boise, the Centennial cyanide gold mine proposal in the Boise River watershed is generally a bad idea.

At a minimum DEQ should require a double liner for the cyanide tailings pond, as well as a leak detection and removal system. Also, with the likelihood that things could go wrong, DEQ should increase the cyanide bonding from $25,000 to fully cover the costs of a spill. As you well know, cleanup costs from cyanide spills can run into the millions.

In addition to the potential drinking water impacts of the mine, please keep in mind that folks from all over hunt, fish and hike in the area around the mine proposal. Please think carefully whether this mine should be permitted at all – and if it must be permitted, make sure it's as safe as can be.

Comment/Response 355.

Commenter: Jason Strope, Boise

I am writing to discuss the proposal about a new gold mine in the Danskin Mountains. This new mine (Centennial Mine) would be located a very short distance from Boise. The cyanide used for mining will end up in the Boise river through both surface and ground water. I do not support this new mine (particularly any company from California mining in Idaho). Unfortunately, if this mine gets permission to begin operating, I do have some requests. The tailings pond must be double lined to prevent water contamination. Also, the cost of any spills need to be paid for be the mining company and by increasing the cyanide bonding. I urge you to protect the land & water within this area of Idaho.

Comment/Response 356.

Commenter: Sally Ferguson, Boise

Thanks you for the opportunity to comment on the proposal by California-based Desert Mineral Mining to open a cyanide leach mine operation 20 miles south of Boise. The proposal has rightly sparked protests from neighboring ranchers and raised new concerns about water quality because of the use of cyanide to extract gold from ore in an area relatively close to the Boise River.

Miners and mining companies all claim their systems are "closed", whether it's indoors or in cyanide heap leach form. They all fail. They all have potentially monumental environmental and health risks. In addition to the cyanide problem, the reason cyanide is used is because the gold usually appears in the ore in minute quantities, something like less than half an ounce of

gold per ton of the amount of material moved. So, even though the company is "limited" to 120,000 tons of ore over five years, they can potentially and literally carve entire hillsides away to get a very small (in comparison) amount of gold. And leave huge piles of mining waste behind, when the operations close down.

As well, the citizens of Montana voted in November 2004 to keep the ban on cyanide leach mining, because the state has been saddled over the years with expensive clean up operations and contaminated ground water, resulting from the failure of cyanide leach mining operations to prevent leakages from tailing ponds into streams, rivers and groundwater.

The DEQ must require that the cyanide tailings pond have a double liner with a leak detection and removal system and they must increase the cyanide bonding from $25,000, to fully cover the costs of a spill. The citizens of Boise and Idaho should not be the victims of a short term mining operation, regardless of what the company says it will do to protect the site and groundwater from environmental harm common to all cyanide leach operations.

Comment/Response 357.

Commenter: John Weber

A quick summary of my mailed written comment on the latest draft and public meeting. My concerns are: leaking (60 mills is very thin), mining knowledge and track record of the company submitting the draft, much of the draft was based on data from 1989 and 1990 (I believe it should be based on current data), cost of cleanup when the mining is done, honestly does the DEQ have the staff to ensure all rules are followed at the mine, and last but no least water use, because I believe a lot will be needed for dust suppression.

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Section Three: Comments Not Requiring Technical or Regulatory Response Relative to IDAPA 58.01.13

Requests for a 30 day extension of the public comment period has been granted, and numerous comments have been received for which there is no basis for DEQ to respond. These comments express concerns regarding mining, cyanidation, or DEQ's authorities, but because these concerns do not address either technical issues or the IDAPA 58.01.13, *Rules for Ore Processing By Cyanidation*, they were not considered in the Director's determination to issue or deny a cyanidation permit.

Comment/Response 358.

Commenter: Debbi Bross, Elmore County

I believe Elmore County has enough pollution to take us into the next century. Hasn't the state endured enough mining with cyanide problems? I believe the water issues in Elmore County are strained with all the dairies and CAFOs permitted by the CAFO Siting Team and County Commissioners, another source of pollution is not required to render our air and water unusable.

Do the owners/profitters live in Elmore County? Are the drinking the water and breathing the air? As with most of the polluters, they don't want to expose themselves and their families to the waste and they live in nice areas in other counties! Do not permit this mining activity!

Comment/Response 359.

Commenter: Darlene

I am opposed to the Desert Mineral Mining Company mining at Blacks Creek Road. I am alarmed that the cyanide will contaminate the water----no matter what the mining company says. They have no data to prove that either. Also, what is their past history? It would be impossible for them to guarantee no problems anyway.

We could not afford water contamination at any time, but especially now when Idaho has been experiencing drought and the drought will probably continue for some time in the future. In addition, the taxpayers are going to be burdened with cleanup from this mine.

I oppose the mine at Atlanta, also.

Comment/Response 360.

Commenter: Boise City, Charles R. Mickelson, P.E., Boise City Public Works Director

The City of Boise (City) has interest in review of the proposed cyanidation facility and draft permit for the proposed Desert Minerals Mining Cyanidation Facility and Draft Permit (Project). The timing of the release of the proposal during the holiday period has not provided sufficient time for the City to conduct review of the proposal in

sufficient detail to determine if the City will develop and submit comments on the Project.

The City of Boise (City) respectfully requests a minimum of a 30 day extension of the comment period on the request to construct and operate Desert Minerals Mining Cyanidation Facility and Draft Permit.

Comment/Response 361.

Commenter: Kay K. Jensen and Dennis A. Jensen

We absolutely do NOT think that mining here in Idaho is appropriate. Our water quality is very important. It seems that a lesson should have been learned by the mess that was created in N. Idaho. Please consider this application carefully.

Comment/Response 362.

Commenter: Michael D. Bruesch

I strongly oppose the construction of this mine. The environmental costs to Idaho and the people who live here far outweigh the benefits to a California-based mining operation. Job opportunities considered, the negative recoil stemming from such an operation would affect far more people than the 20-30 people it would provide with a temporary job. If we allow such use of our land to exploitation of this nature, what other mining outfits will seek to make their pillaging profit off of our gorgeous state? For the ranchers, for the farmers, for current and future Idaho residents, please do not grant a permit for this mine.

Comment/Response 363.

Commenter: Steve Mickelson

We Idaho residents expect you to do you your job, which is to protect our environment, by denying the application and permit to Desert Mineral Mining. It is outrageous that they want to use cyanide in their process----this substance is too hazardous to our water supply and should NEVER be allowed.

Comment/Response 364.

Commenter: Terry Baird

I am writing to object to the DMM proposal and ask that DEQ do everything legally to decline permit approval. Unfortunately I have not had a chance to review the application as I only saw this issue in the Idaho Statesman today, and am leaving town for a week. I protest in principle to any mining operation where potential cyanide pollution is a risk to our water supply and wildlife health. I don't believe the potential benefits of such an operation can possibly outweigh the risks. We need to be more diligent in Idaho about preserving our natural resources and water in particular, a commodity which is already in undersupply.

Comment/Response 365.

Commenter: Trish Charlton

I would like to register a resounded NO on their request to mine. For years we have been naive and assumed government and responsible companies will protect the environment. Now we are paying the price in a thousand ways -- fish unfit for consumption, lakes and oceans that can never be restored, rampant cancer often directly linked to chemicals, to name only a few. The general public depends on our government entities to protect both human and environ-mental health. You have banned DDT and other harmful chemicals, so it is hard to understand how the use of cyanide would even be an option for this company. Please act on behalf of the general public rather than corporate profit and deny this permit.

Comment/Response 366.

Commenter: IncubusROXS18 (e-mail)

My family and I do not want this mine!! Its going to be on a very special land were we like to hunt, it would just ruin it for everyone! Please dont!!

Comment/Response 367.

Commenter: Charles & Jeanette Drouillard, Meridian

We are against any mining on the Boise River especially using cyanide.

Comment/Response 368.

Commenter: Dr. Richard E. Jay, Boise

Messing with the safety of water to satisfy generous polluters is both criminal and politically short-sighted. Once cyanide is turned loose, it can turn up anywhere--not withstanding "safe confinement" facades. Better deny that application to mine-and-poison, or there will be some angry (and perhaps sick) voters and their kids. Guess who will be blamed?

Comment/Response 369.

Commenter: H.K. Kriesenbeck, Boise

May I respectively ask and request an immediate public an answer in The IDAHO STATESMAN'S editorial page section of "Our View" giving the public names in full with titles and addresses and any legal positions of authority to grant permission and to allow any and all dangerous actions such as mining cyanide in and for the state of Idaho. We gratefully acknowledge the late editorial outlining the proposed intent and highly praise editors for the public's awareness. A three-day holiday notice is hardly time to prepare for any holiday delinquency intentional or not. We -urge governmental protections in the future, holidays or not.

Comment/Response 370.

Commenter: Carla Stern

Comments: I am writing to express my concern regarding the proposed gold mining operation on Blacks Creek Road. I think that there are too many risks associated with this project (a marginally maintained road; an insufficient amount to cover costs in the case of leakage); also, given mining companies' historically free ride in the intermountain west to rape the landscape, I highly doubt the integrity of Desert Mineral Mining to maintain a clean and safe operation.

Comment/Response 371.

Commenter: James E. Nolan

The company will be off the hook should they contaminate the area with cyanide because they will have paid $25,000 in advance. Idaho is too great to ruin with cyanide. I would hope that the mining operation would be prohibited.

Comment/Response 372.

Commenter: Ron Stricklin

The comment period should be extended an additional 30 days due to the holiday season. This type of project seldom draws interest when first introduced and by the time the information hit the mainstream, the holiday season was here. The last thing many people think of doing at this time is writting comments.

Considering the location of the mining activity, a failure in the cyanide containment could have severe consequences on the Boise river and the city of Boise (a significant number of people for Idaho). The company disaster response plan needs thorough examination by an independent entity and the results published for public use in commenting.

The area of the proposed activity gets a lot of recreational use for much of the year necessitating upgrades to the Blacks Creek Road from I-84 to the mine.

Until those issues are addressed, I do not believe this permit is in the best interest of myself, the recreationists using the area, and the public down stream from a potential cyanide spill.

Comment/Response 373.

Commenter: Walter Bryant , Caldwell

I voice a very negative comment on this proposed mine. The DEQ has a great deal of evidence of the effect of mining and cyanide on the water quality in the western US. Despite all claims by mining concerns, leaching of chemicals remains a huge, expensive and unhealthy problem. I am very familiar with the problems at the bottom of the Blackfoot River in montana.- It will take millions of dollars to clean up the dam that holds material that could contaminate the Clark Fork and Columbia River. A 25000

dollar bond is absolutely ridiculous in comparison to the hazards involved. I would ask the DEQ to stop this mining proposal.

Comment/Response 374.

Commenter: Catherine M. Brown

I honestly believe the application for this Cyanidation permit should be denied. With the aquifer decline (70 feet over the last 35 years), I feel we need to find and encourage industries that do not rely heavily on water or dangerous chemicals like the Desert Mineral Mining people intend to use to extract gold from the ore. Elmore County needs to look to the future and start conserving what precious water they have left.

Comment/Response 375.

Commenter: Janie Heath, Boise

No thanks to their proposal - let them introduce their 'safe level' of cyanide to some area unconcerned about poisons for profits.....Mexico maybe.

Comment/Response 376.

Commenter: Sherry McKibben, Boise

I oppose the development of gold mines in the Blacks Creek Road area. Water quality is of great importance in our area and potential contamination by cyanide would be outrageous.

Comment/Response 377.

Commenter: Joe Moran, Boise

This area already has one of the highest cancer rates of any city I've lived in. Our water supply is already endangered by macro-farm and macro-dairy pollution while the continuation of our basic water supply is in jeopardy because of the GREED of the afore mentioned and their support by Craig, Simpson etc. This new gold mine you are considering resembles one I witnessed in Basin, MT. It was situated on the top of a mountain overlooking the town and the arsenic it used for leaching seeped down into the towns water supply yet local politicians refused to remedy the situation even when the arsenic ponds were discovered to be leaking. Boise has a lot of good points even with the overwhelming corruption of it's politicians and lawyers. **Lets preserve those positive points such as our family centered values and park system by guarding our environmental quality as closely as possible!**

PS-Why not get the records of that gold mine in Basin MT around 1990 and how it damaged the local environment.

Comment/Response 378.

Commenter: Peter van Ravenhorst

I believe the proposed Desert Mineral gold mine with the polution potential will pose an unacceptable risk to an area that is used by so many recreationists like our family and numerous friends. As the tsunami showed us recently, all man's precautions, predictions and safeguards mean nothing when Mother Nature kicks in with a surprise. Thanks for your, hopefully sensible, approach to this.

Comment/Response 379.

Commenter: Bill Bollinger

This area serves as one of the best local multi-use areas in the Treasure Valley. This road currently provides access to Prarie and is the most direct route for recreation and residents of that town. The road serves campsites, multi-use trails, and the South Fork of the Boise River.

A large mining operation there would undoubtably degrade the road, increase traffic, and most importantly create an environmental hazard in an important recreation area close to Boise. The risks to the watersheds of cyanide mining operations are very well documented and it would be ludicrious to deny that locating such an operation on Blacks Creek Road would pose no such hazard there.

I cannot accept any argument that economic or other benefits would outweigh the damage to the environment of the area, not to mention the current users of the road, the trail system and the Boise River.

Comment/Response 380.

Commenter: Dick Davis, Houston, TX

I believe that the bond for potential cleanup costs should be at least a million dollars.

Comment/Response 381.

Commenter: Charles Jacobs

Please do not permit the use of cyanide--closed or ponded--in the process of mining gold.

Comment/Response 382.

Commenter: Lyn Henri

I relly don't think the use of cyanide in a mine will help in a mine, because cyanide is a dangerous substance, and I think that will only endanger those who live near that mine. Please find a different way to clean the ore from the mine besides cyanide; your efforts to change your methods of mining will be appreciated!

Comment/Response 383.

Commenter: Roberta Richardson

Please stop Desert Mineral Mining's planned gold mine on private land! It will be a besmirchment of the beautiful state of Idaho.

Comment/Response 384.

Commenter: Kittine A. Moreno, Davie

Thank you to your department for allowing an extension of the public comment period on the gold mine that is being proposed by Desert Mineral Mining. Although I am not a resident of Idaho, the destructive elements of a mine, even on private land is of concern to me. I wish for your organization to consider the needs of the community, which outweigh all marginal profits gained from a mining operation. The use of cyanide, of which will be used in treating raw ore, is extremely dangerous to the local environment. The potential clean up will also bring a deficit to the community from an economic stand point. Therefore, in consideration of the number of cattle ranchers around the proposed land mine, and the adverse effects that the cyanide will have on the immediate environment, approving the mine would be a wrongful act.

Please take careful consideration of the many adverse effects that the mine will have in this community: economic loss for cattle ranchers, and those locals who depend on that income; and the severe deterioration of the local environment through the use of cyanide, including potential groundwater contamination. In closing, please reject the mine and put the community first.

Comment/Response 385.

Commenter: B. Schau, Florham Park, NJ 07932

It is quite clear that mining operations have been allowed to despoil our earth. i want to be on the public record opposing this mining effort in idaho for gold. it is environmentally devastating. i am sick of the earth getting decimated like this.

Comment/Response 386.

Commenter: Shannon R Dee, Boise

I am 100 percent against the proposed gold mine 20 miles south of Boise. The required bond is ridiculously low, there is no guarantee that this new system is fail proof and it is too close to a population center. Other states protect their citizens and don't allow this type of mining. I am curious why Idaho does not do the same?

Comment/Response 387.

Commenter: Sergio Monteiro, Los Angeles, CA

I am contacting you to register my opposition to the Desert Mineral Mining project on Blacks Creek Road, located 20 miles south of Boise, Idaho.

Being a Washington State University graduate (Ph.D., Physics, 1981) I have live not too far from the area in question, which I know well because of my several camping forays in Washington, Oregon, Idaho and elsewhere. It displeases me to see the mining companies destroying the environment and I would like to see your office standing more for the environment and natural beauty of Idaho.

Comment/Response 388.

Commenter: Charles Jacobs

Please do not permit the use of cyanide--closed or ponded--in the process of mining gold.

Comment/Response 389.

Commenter: Martin and Lavonne Glynn

It is a real mistake to even consider the use of Cyanide in any mining activities. As proven in Montana, it eventually will get into the water systems and do a lot more damage than ever imagined.

Please help prevent this from becoming a reality. once the rivers and water supplies are contaminated it is too late.

DON'T BE SORRY. PLAY IT SAFE !

Comment/Response 390.

Commenter: Jacob Haeberle, Pocatello

Please reconsider allowing a mine being built on the Boise River. Consider the actions taken by our neighboring state Montana in banning cyanide in mining operations. Such a process cannot be good. Please preserve the Boise River.

Comment/Response 391.

Commenter: Jon Runyeon, Salmon

Please help protect our health by stopping the Centennial Mine project. Cyanide mining is a method which should not be utilized. As you know, cyanide poses health risks to humans and wildlife. Cyanide mining has been banned in Montana. You have a great opportunity to protect the health of Idahoans. Please, stop the proposed cyanide mining.

Comment/Response 392.

Commenter: Wes Jones

My name is Wes Jones and I am writing to voice my concerns against the proposed gold mine by Blacks Creek. I cannot see any benefit to be gained by allowing a company with such a poor track record to mine for gold a potentially hazardous way. I urge you to not allow this mine to take place.

Thank you for your time.

Comment/Response 393.

Commenter: Gene Johnson

I understand that a Californian company is planing to mine 20 miles upstream from Boise, in the Blacks Creek area. Just expressing my concerns for the area. I enjoy this area very much as does my family. My biggest concern is for the use of cyanide, and it getting into the ground water and getting into the rivers. I understand that cyanide has been outlawed in the state of Montana.

Comment/Response 394.

Commenter: Irene V. Victory, Boise

We are in full support of the subject gold mine on Black's creek Road 20 miles south of Boise.

Please forward a copy of this letter to Desert Mineral Mining Company or provide us with a mailing address for the company.

Comment/Response 395.

Commenter: Jeff Guzi, Boise

I have been a Boise resident for over 13 years now and really enjoy the outdoor recreational activities close to this city I call my home.

I don't believe we need another gold mine in Idaho. Can this company ensure the safety of our drinking water supplies? Water flows downhill and downstream from that area to Boise. Clean water is a right that every citizen of Idaho should be entitled to and have a right to. Can you tell me for certain that no cyanide would leach out of the tailings into our precious water supply and not damage the ecosystems we so much depend upon.

Count me in as one person who is opposed to a mine going up in the Danskin area of SW Idaho.

Comment/Response 396.

Commenter: Barbara Chattin, Boise

I read the plans of the mining project in the Blacks Creek drainage and feel that the state require a much larger bond for any damage that might occur from the mine.

I am definitely against the Atlanta project because of the damage that could be done to the drinking water, recreation and so on.

Comment/Response 397.

Commenter: Cheryl Cox, Idaho Falls

It amazes me that Idaho would even consider the use of cyanide in a mine so close to any water supply, let alone one critical to Boise. Does our need for gold justify this risk?

Until it is a matter of survival for the people, the state, or the nation that gold must be leached from the ground with cyanide, please reject any attempts to contaminate Idaho further by allowing the process at Centennial Mine.

Comment/Response 398.

Commenter: Greg Leslie, Meridian

I am very concerned about the use of cyanide in the Boise River.

So many of us in the valley use the river for recreation. I personally go fishing often along its banks and boating with my family at Lucky Peak. What I love about the river is that it is so clean. Cyanide seems very dangerous to our health, especially all the children who have a lifetime to develop health problems. I have traveled to New Hampshire where some of the main rivers going through cities are completely unuseable. No fishing, no swimming, no tubing, just a dirty river quietly slipping by. Our water resources are incredibly valuable here, please do whatever it takes to stop this mine from happening. Thank you.

Comment/Response 399.

Commenter: Dr. and Mrs. Mark Michaud, Boise

We are writing to let you know that we strictly oppose the opening of a gold mine in the vicinity of Boise and its public water supply. We live adjacent to the Boise River, and one of the great joys in our lives is looking out onto the river and watching the magnificent array of wild birds, including great blue herons and bald eagles, soaring majestically over the water looking for fish. We also enjoy opening our patio doors on warm summer days and hearing the laughter of rafters floating lazily down the bright ribbon of water just a stone's throw from our door.

What will happen when, as has occurred so often in the past, there will be an "unforseen accident" at the mine and our beautiful river will be poisoned? What will happen to all of the great birds? Where will the rafters go? Where will our quality of life go? We'll tell you -Into the toilet, while the owners of the mine laugh all the way to the bank.

After having to live for many years in the stinking city of Chicago, where nobody would dare swim in most of the rivers because the water was so contaminated with biological and industrial effluent, we did NOT choose to move to Idaho so that we could be near more of the same! While this gold mine will produce some short-term profits for California investors (and possibly for the landowner willing to sell out to them?), it will permanently degrade the quality of life, perhaps disastrously so, for all Idahoans. There is no amount of gold worth compromising our water, wildlife and spectacular recreation for. We therefore most adamantly oppose ANY efforts to allow outside or in-house sources to steal away some of the best reasons to consider life in Idaho, particularly Boise, worth living.

Comment/Response 400.

Commenter: Diane Reed, Springfield, VA

Please do everything within your power to stop cyanide gold mining on the Boise River. The environmental impact to both human and animal life is far too risky, and the health and welfare of all residents should be the first priority. As a longtime Boise River enthusiast, I sincerely urge you to minimize all gold mining attempts. All you need to do is drive to Idaho City or up Centerville Road towards Placerville, and you will see the tailings that still remain from gold mining efforts over one hundred years ago. If that environmental degradation has still not been "cleaned up," what makes you believe any corporation will self-regulate its impact now? The history of gold mining in Idaho has always been a "snatch and run" endeavor, with no regard for long-term consequences. You can do your part to protect the most gorgeous state in the union and help preserve its natural beauty which will bolster the tourist and recreation ecoonomy. Don't let the banks of the Boise River be turned into a pile of rubble by people who do not truly care about Idaho's future.

Comment/Response 401.

Commenter: Dan Robbins, Boise

I live in Boise and oppose the proposed cyanide gold mine in the Danskin Mountains.

I have spent a great deal of time in the Danskins climbing the high ridges and introducing my young daughter and her friends to hiking. In fact, I just took several girls on a hike to the top of Three Point Mountain, which is very close to the proposed mine's location.

Just the added traffic a mine would create would change the area forever. That's not even to mention the potential environmental factor of a mine of that sort.

Let's not ruin another recreation for our children's children.

Comment/Response 402.

Commenter: Linda Marie Hilton

i urge you to reject the application for a cyanide leach mine at the centennial mine site. the current law in this state only requires at max a $100,00 bond to be posted to deal with what ,given the mining industry's history as a whole, is sure to be a leak of cyanide into the boise river, a source of our drinking water. the law should state that a bond of $250,000 for each pond at a given site must be posted, without possibility of forfeiture. furthermore, the prospectus, a document open for public perusal, and all subsequent financial statements, must disclose what the probable cost of clean up would be in the event of a leak of cyanide laden material into our watershed. the time to prevent this possibility is now. the health of those who live downstream is too important to leave it subject to the promises of a mining company. i urge you again to reject this application for the centennial mine project.

Comment/Response 403.

Commenter: Darlene, Boise

I emailed some weeks ago, but am again pleading with you to say no to the Black Creek Mine. I don't care what the owners say, mines always pollute and contaminate.

DMM is not a registered business in California. It is registered under the name Daniel Terzo, registered in Nevada and the incorporation status of seven of its businesses are listed as being either in default or having been revoked. This is a red flag! Terzo's partner in DMM, Gregg Corlyn has seven similar strikes on his record, including two corporations whose statuses are permanently revoked.

Comment/Response 404.

Commenter: EarthThunder

Please count my voice to NOT all mining in our Sacred Sites.

I just received word of the above company opening a mine in my home.

Can you share with me the status of this application?

Wado, we open our bridge and listen for your Journeys,

Our Teachings are inclusive for all beliefs and religions. Our Teachings focus on The Wild Universe as our boss and we seek ways to live as many lifetimes as LifeWork is needed by The Wild. By keeping our nose to our work we then support peoples of different beliefs.

Are Humans a complex mystery? Are 7 billion humans massively imploding in fear and exploding in addictions? Humans addition to fear-tragedies from fear-- often cause them to

terrorize their bodies with image fears- expectations of making their bodies into media candy. Then they walk the walk of anxiety-phobia, pain, loneliness and losses. These human's use retail therapy to self medicate. These humans are lost families as their community, who might help them, usually only see that they dont understand their choices. Their communities feel shame for their own selection of fear-addictions, so all drown. Energy for transforming fear, pain,

loneliness and loss is too low to do anything but the same box over and over and over.

Co-create a functional 'Spirit Community'. Confront tough 'symptoms'. Support the courage to be confronted. Nurture naked freedom.

Do we all live on the same thrusting, composting, territorial and thriving Wild Planet????....are there answers by being a Forest? Are there ways to re-think our choices from how a Forest heals, composts and renews after fires? How a Forest lost never forgets it began as a Seed never forgotten by Wild Wind, Wild Waters, Wild Inner Earth Fires and living Form? Will

humans look outside of their addictions?

"We can't solve problems by using the same kind of thinking we used

when we created them.: - Albert Einstein

Comment/Response 405.

Commenter: Doris Helge, Executive Director, New Paradigm Seminars

I am opposed to the proposed mining in the Blacks Cr. Area.

Cyanide mining in so many other areas has yielded proof that the process cant be trusted. The California company knows Idaho laws are to lax that it can use processes already banned in many foreign countries even so-called backward countries and in Montana.

As the recent oil spill, cover up, and blatant disobedience of DEQ orders has proven in the Atlanta area (Atlanta Gold mining operation), DEQ cant be everywhere at once. Mining companies seem to do whatever they can get away with.

If allowed to proceed, the potential mineral yield would be quite small compared to the potential dangers.

Idahoans deserve clean air and water for the next generations. If we continue to needlessly pollute, where will we live?

Comment/Response 406.

Commenter: Paul Martin Boise

Please do something to stop this ridiculous mining that is planning to go on above Boise in the Boise River drainage. There have already been contamination spills and more will be on their way. Those type of people don't care about what the rest of us downstream. I live in East Boise and my property is serviced by a private well. I am sure not interested in any contamination coming my way from careless actions by these mining companies. The poisons these people will put into the ground and the possibility of spills could have serious detrimental effect on those of us living downstream. Please help us.

Comment/Response 407.

Commenter: Ellen Piper

I wish to express my concern about the Black Creek Cyanide God Mine proposal. I wish to request that this mine be disapproved and cyanide mining be banned in Idaho as it has been in Montana.

My family and I have enjoyed many springs and summers of recreation in the Black Creek and Danskin Mountains area. We would not like to see this area become an environmental hazard. There is so much wild life in this area ... water buffalo, mule dear, fox, eagles, hawks and I could go on and on!

Please help stop the California company from using cyanide gold leaching in

this area.

Comment/Response 408.

Commenter: Bill Uhl, Atlanta, ID

Please consider this a letter of opposition re: the proposed mining in the Blacks Cr. area.

My opposition is due to the inevitable spills associated with cyanide mining and the lack of conscienciousness of mining companies. Over and over, mining companies have left a legacy of toxins. In state and country after state and country, they have engaged in farcical cleanups resulting in water and ground contamination that can never be reclaimed.

I am against cyanide mining in any setting for several reasons including:

As indicated by the recent oil spill, cover up, and blatant disobedience of DEQ in the Atlanta area (Atlanta Gold mining operation), mining companies do whatever they think they can get away with. Plus, DEQ cant be everywhere at once.

There are so many valid reasons (including toxic spills in waterways that cant be healed) that Montana, Germany, Greece, Czeck Republic, Turkey, Costa Rica, Argentina, Equador, and parts of Colorado have banned this dangerous toxic process. Over and over, it has proven that the process is doomed to fail.

If the mine opens, it will only be required to have a $250,000 clean-up fund, but a single spill can cost millions to clean up. Mining companies are notorious for declaring bankruptcy and beginning again under another name. (Check out the past of Atlanta Gold, a Canadian company that could pollute the Boise River and Boise water supply in order to finance a Canadian diamond mine.)

Since the Canadian and California company investors are not Idahoans, and the vast majority of the wages are low, any arguments that we need these mines for economic reasons are questionable. Idaho would be far better off making recreational dollars (which requires clean water and air) than allowing preventable pollution that would further tax limited DEQ enforcement resources.

I continuously scratch my head and ask: Why would Idaho even consider cyanide mining when so many countries and states have banned it? Cant we learn from others instead of inviting another environmental disaster in our beautiful backyard?

Comment/Response 409.

Commenter: Gregory P. Wyatt, United Water, Boise

United Water Idaho provides public drinking water service to approximately 240,000 people in and around the City of Boise, Idaho. Approximately 20% (3.2 billion gallons) of the water we provide annually to these citizens comes from the Boise River. The other 80% or 12.8 billion gallons is derived from numerous groundwater wells throughout the Boise area. The citizens of Boise are fortunate that up to now the sources from which their drinking water is drawn have been of a very high quality. Up to this point the Boise area and its watershed has also been free of any significant commercial or industrial operations that could pose a threat to that high quality water in the Boise River, its drainage area, or the aquifer underlying the area.

I was disturbed to learn that Desert Mineral Mining(DMM) had made application for permission to extract gold using a cyanide leach process approximately 20 miles east and south of the Boise area on Blacks Creek Road. Although we have not performed and in-depth review of DMM's application, I have read the permit filed by DMM for their leaching process. I have read their water management plan, their surface and ground water quality

monitoring plan and their proposal on the construction and monitoring of the impoundment facility. I am not comforted.

I am requesting that the Idaho Department of Environmental Quality deny DMM's permit application for the cyanide leaching facility. Other states have banned the cyanide leaching process entirely. The potential risks posed by this operation to the safety and integrity of the waters near Boise and the entire Treasure Valley are great regardless of the monitoring assurances provided in DMM's permit. It is simply not good public policy to permit this type of operation upstream of public drinking water supplies or to potentially jeopardize water supplies for years to come.

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